

THE USE OF INTENTIONAL PRAYER TO INFLUENCE CHRISTIAN MARRIED
COUPLES' PERCEPTION OF THEIR RELATIONSHIP.

By

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Abstract of Dissertation Presented to the Graduate School
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The purpose of this study was to investigate prayer as a therapeutic tool that counselors may use in serving their clients. Specifically, this study examined whether prayer improves Christian married couples' perception of the quality of their relationship. The critical questions addressed in this investigation were the following: When couples pray together, is their perception of the quality of their marital relationship modified and how? Related to this question were two parallel questions. First, does couples' level of spiritual maturity differentially mediate the benefits of praying together? Second, are there specific characteristics among couples whose marital relationship improves as a result of the intervention and those who do not.

Christian married couples from fifteen churches in north central Florida participated in this study. In all, fifty-one couples participated in the study (102 individuals), and were randomly assigned to either the experimental or control condition.

There were twenty-five couples in the experimental group and twenty-six couples in the control group. Change in the perceived quality of Christian married couples' relationship was assessed by published measures of interpersonal communication, affective expression, affective involvement, avoidance of emotional intimacy, anxiety in emotional closeness, religious well-being and existential well-being. The experimental design for this study was a pretest-posttest control group design with repeated measures and random assignment.

The analysis of the data yielded mixed results. Specifically, no significant differences for main or interaction effects were observed for interpersonal communication, affective expression, affective involvement, anxiety about emotional closeness and religious well-being. In contrast, significant findings were observed between the covariate of spiritual maturity and the dependent variable of existential well-being, and the covariate of the number of children at home and the dependent variable of avoidance of emotional intimacy.

CHAPTER 1 INTRODUCTION

Overview

Conflict in marriage is inevitable. Given the differences inherent in being male and female, in coming from different family backgrounds, expressing cultural differences and religious differences it is not surprising that married couples have conflicts. Within the context of their marriage couples struggle to find ways to deal both with the differences and the conflicts, including working with marriage and family counselors. Marriage and family counselors use a variety of therapeutic strategies to help couples address and resolve conflict. Traditionally, marriage and family counselors have employed a rational perspective as the primary lens for viewing and understanding relationships in conflict. As a result, most intervention strategies have been primarily empirical in perspective.

Researchers in the helping profession have historically chosen not to explore the realm of human spirituality (Bergin, 1992; Ellison & Smith, 1991; Finney & Malony, 1985; Griffith, 1986; Poloma & Pendleton, 1991; Sirch-Stasko, 1996). Spirituality, as used in the present study, is the transcendental relationship between a person and a Higher Being (Richards & Bergin, 1997). Different reasons for this practice have been proposed. Moberg (1971) points to a practical concern over church-state separation in institutions receiving federal funds. Targ (1999) and others (Finney & Malony, 1985; McBride, Arthur, Brooks & Pilkington, 1998) assert the reason is the historic rift between

science and theology. Historically, spirituality has been seen as being opposed to the scientific way of thinking. This perspective has limited the view of counseling toward spirituality and more particularly the practice of prayer as an expression of human spirituality (Bergin, 1992; Dossey, 1993; Ellison & Smith, 1991; Greeley, 1991; Griffith, 1986). Generally, spirituality and prayer have been under studied in therapeutic literature (Barnhouse, 1979; Bergin, 1992; Griffith, 1986; Poloma & Pendleton, 1991; Torrey, 1986).

The marriage and family therapy profession, like other professions that are dedicated toward understanding human behavior and promoting individual growth and development, has seen itself as a science that is primarily empirical in its approach. Within this tradition, therapeutic movements have been built upon a Newtonian worldview that excludes spiritual perspectives (Bergin, 1992). The Newtonian worldview is understood as mechanistic, deterministic and reductionistic. According to Boring (1950) and others (Anderson & Worthen, 1997; Bergin, 1992; Ellison & Smith, 1991; Genia, 1992; Poloma & Pendleton, 1991; Ross, 1994; Stander, Piercy, Mackinnon & Helmeke, 1994; Quackenbos, Privette & Klentz, 1985) the decision to exclude spiritual perspectives from the domain of scientific inquiry was done for good historical reasons emanating from the philosophical rift between science and religion. Nonetheless, the decision to emphasize a mechanistic model provided a structure and stimulus for advances in the study of human behavior that, given the historical context, probably would not otherwise have occurred (Ellison & Smith, 1991; Wolpe, 1958).

Despite some advantages, such as a primary focus on that which is intrinsically measurable, mechanistic theories of human behavior failed to provide a comprehensive

account of human functioning for a variety of reasons (Ellison & Smith, 1991). For example, Polkinghorne (1983) asserts that the methodology of the natural sciences is inadequate for studying human phenomena because it fails to address the fullness of human experience, including values, meaning and perception. In addition, mechanistic models do not account for the spiritual dimension of being human. Consequently, alternative models for thinking about the complexities of human behavior have gradually developed. These new models are expanding the parameters of inquiry to include new concepts and explanations of human behavior, including the human spiritual dimension (Anderson & Worthen, 1997; Bergin, 1992; Genia, 1992; Ross, 1994; Stander, Piercy, Mackinnon & Helmke, 1994).

Humanism is an illustration of an alternative position moving in the direction of more openness to the human spiritual dimension. The humanistic movement as reflected in the writings of Maslow (1971), Rogers (1951) and Yalom (1980) emphasizes a different view of human nature and of the change process. In contrast to the determinism of the Newtonian model the humanists adopted a more naturalistic position that emphasized the importance of understanding the natural sequence of growth and development of human potential (Richards & Bergin, 1997). For example, Rogers (1951) taught that human self-actualization is the most prevalent and motivating drive of existence and encompasses actions that influence the total person. The humanistic model opened a new vision of human potentialities that liberated human behavior studies from their mechanical strictures but it did not include the important spiritual dimension of the human condition (Anderson & Worthen, 1997; Bergin, 1992).

Cognitive psychology provides an additional illustration of the move toward achieving a more complete understanding of what it means to be fully human (Bandura, 1986). Cognitive psychology represents an important bridge in that it has brought the rigor of science together with an expanded range of behaviors to be studied. The cognitive movement created a space for serious discussion of topics like personal agency and self-control, as opposed to control by biology or environment (Richards & Bergin, 1997). The cognitive movement has contributed to the shift away from mechanism by combining social, cognitive, and affective variables with rigorous research (Bandura, 1986). For example, researchers of the cognitive psychology tradition challenged deterministic and reductionistic views of human beings with their emphasis on the interdependence of cognition, affect, and behavior and their belief that human beings can change the way they feel and behave by changing their thinking (Ellis, 1973).

The developmental and wellness system approach, with its concern for growth and for health as opposed to pathology, derived strength from the humanistic movement and in turn strongly reinforced the basic trends in humanistic theories (Bergin, 1992). The developmental/wellness perspective to counseling is based on stages that various personality theorists have outlined that people go through as a normal part of human growth. Counseling from this perspective is based on whether a problem a client is having is based on a developmental task of life. Behaviors that are appropriate at one stage of life may not be seen as healthy at another stage of life (Gladding, 1998). Wellness goes even further than development in emphasizing the positive nature and health of human beings (Myers, 1992). Both the humanistic movement and the counseling and development field have been influential streams in therapeutic thought

and have provided support for the new spiritual perspectives that are developing. These illustrations indicate that within counseling in general, and marriage and family counseling in particular, there is a growing interest in explaining the complexities of human behavior, including the consideration of factors that previously have not been the focus of scientific inquiry, such as spirituality.

In contrast to behavioral scientists' historic reluctance to acknowledge the importance of spirituality and prayer a recent poll (Sheler, 1994) found that 93% of Americans say they believe in God or a universal spirit (Poloma & Smith, 1991). Of those polled 62% said religion is increasing its influence in their personal lives. Seventy-six percent of those polled believe God is a heavenly father who can be reached by prayer. Similarly, a later poll (Woodward, 1997) on Americans and prayer reported 87% believe God answers prayers. Of those polled 82% ask for health or success for a child or family member when they pray. Seventy-five percent report they ask for strength to overcome personal weaknesses. In a separate poll Greeley (1991) found that 32% of American husbands and wives pray together often. Steinken (1992) reports on a study that found the best predictor of whether or not a couple is happy together is joint prayer. From these polls it becomes clear that there is a difference in what is reported as important to the American public and the areas of historic interest in the scientific community (Anderson & Worthen, 1997). The scientific therapeutic literature has under studied a decidedly important aspect of the American human experience (Ellison, 1983; McBride, Arthur, Brooks & Pilkington, 1998; Richards, 1991; Poloma & Pendleton, 1991).

Paralleling the documented popular interest in spirituality and prayer, a new openness to it is presently occurring in scientific studies being conducted in the field of medicine (King & Bushwick, 1994; McBride, Arthur, Brooks & Pilkington, 1998; Targ, 1999). Medical studies are showing that prayer is effective in promoting physical recovery and healing of the body (Schlitz & Lewis, 2001; Targ, 1999). Prayer is understood as an outward expression of a person's inward spirituality and the terms are used interchangeably throughout this paper. Dossey (1993) reports positive results in his research on the effects of prayer, or what is now being called "distant intention." He reports the results of a double blind experiment with people admitted to a coronary care unit. Patients who were the focus of distant intention (prayer) had fewer complications and required less medication than the people in the control group who did not receive prayer. In another study Sicher, Targ, Moore, and Smith (1998) found that being prayed for at a distance had a significant positive impact on AIDS patients health and well-being. Currently there are over one hundred and fifty studies in progress exploring how prayer is effective as a therapeutic medicine for the physically sick (Schlitz & Lewis, 2001; Volz, 1999).

Additionally, in the field of psychology, marriage and family counseling researchers are asserting spirituality, and specifically prayer, is a resource that is effective with helping some couples experiencing conflict. For example, Butler, Gardener, and Bird (1998) found that religious couples used prayer as a spiritual resource to help soften the hurt and tension between spouses in conflict. In this qualitative study, Butler et al. used structured interviews of religious couples to investigate effects of prayer on couple interaction during conflict. Their findings suggest that prayer invokes a couple-God

system, which significantly influences couple interaction during conflict (Butler et al. 1998; Greely, 1991; Griffith, 1986). A couple-God system or triangle is developed by the couple through their shared belief system concerning their deity, including their understanding of their God's interest and involvement in the marriage, and in this manner God becomes a functional member of the marital system. Butler and Harper (1994) identify prayer as a method for the couple to establish, maintain, and interpret their triadic relationship with their Deity. For these religious couples, the spiritual domain stands alongside the biological, psychological, and systemic domains as an influence and mechanism for change.

My own experience is comparable to the work cited. In thirty-two years of ministry I have often recommended prayer as a way of dealing with the stresses of life. Often congregation members would report that prayer was a help to them in handling the challenges of life. I have been encouraged to hear their positive reports of the effectiveness of prayer. I, personally, have found comfort, guidance and encouragement through prayer. I have often employed it in the stresses and conflicts in my own marriage. Congregants have shared with me that they too employ prayer as a resource in managing the stresses of their marriage.

Statement of the Problem

There is a disparity between people's views about the centrality of spirituality in their lives, as expressed in prayer, and the attention it has received from behavioral researchers (Anderson & Worthen, 1997; Poloma & Pendleton, 1991; Richards & Bergin, 1997; Ross, 1994; Stander, Piercy, Mackinnon & Helmeke, 1994). People acknowledge an appreciation of the spiritual dimension of prayer in their lives. In contrast, behavioral

researchers, because of their reliance on the traditional scientific paradigm, have limited their opportunity to fully focus on such matters (Gorsuch, 1984). Notwithstanding the historic tradition, there is now emerging a body of research that is investigating spirituality and prayer and how it relates to psychological well-being (Poloma & Pendleton, 1991; Stander, Piercy, Mackinnon & Helmeke, 1994; Warfield & Goldstein, 1996). This line of research is consistent with Gorsuch's (1984) suggestion that "It may . . . be time to broaden the [research] paradigm to include other, less traditional approaches" (p. 228). From this perspective, it would be appropriate to investigate how the psychological well-being of couples is enhanced through their use of prayer.

Purpose of the Study

Helping couples adjust to the vicissitudes of their relational life is a major concern of marriage and family counselors. Traditionally counselors have offered to couples therapeutic conversations, enrichment retreats, workshops and conferences as interventions to help them adjust to life's challenges together. The purpose of this study is to investigate yet another tool that counselors may use in serving their clients. Specifically, this study will examine whether prayer improves married Christian couples' perception of the quality of their relationship. The critical questions to be addressed in this investigation are the following: When couples pray together, is their perception of the quality of their marital relationship modified and how? Related to this question, I am interested in answering two parallel questions. First, does couples' level of spiritual maturity differentially mediate the benefits of praying together? Second, are there specific characteristics among couples whose marital relationship improves as a result of

the intervention and those who do not? The intent is to determine if the couples' perception of their relationship changed or not through the use of prayer.

Theoretical Basis of the Study

This investigation is about the interpersonal relationship and personal well-being of Christian couples and whether their interpersonal relationship and personal well-being is influenced by prayer. The theoretical bases of this study rest upon the foundations found in couples' communication, relationship intimacy, well-being and spiritual and religious maturity. For purposes of this study it is assumed these four theoretical notions mold and shape the couple's experience and perception of their relationship.

Within the context of family counseling, relational theories emphasize the importance of married couples' communication (Brock & Barnard, 1992; Gladding, 1998; Gottman, Notarius, Gonso & Markman, 1976; Jacobson & Holtzworth-Munroe, 1986; Olson & McCubbin, 1983; Satir, 1972; Skinner, Steinhauer & Santa-Barbara, 1995; Steinhauer, Santa-Barbara, & Skinner, 1984). Effective communication is a central feature to the success of every marital couple. For example, effective communication is defined as the achievement of mutual understanding, so that the message received is the same as the message intended. If the message is clear, direct, and sufficient, then mutual understanding is likely to occur. The Process Model of Family Functioning as developed by Steinhauer et al. (1984) serves as a practical example of relational theory.

Effective couple communication is an essential feature of the Process Model of Family Functioning and includes affective expression and affective involvement (Steinhauer et al., 1984). This model asserts that task accomplishment is the goal of every family. Tasks are understood as the demands of life that the family must organize itself

to meet. Examples of family tasks include allowing for the continued development of all family members, providing reasonable security, ensuring sufficient cohesion to maintain the family as a unit, and functioning effectively as part of society. Successful achievement of a variety of basic, developmental, and crisis tasks is accomplished through clear communication. In the Process Model of Family Functioning two essential features of family communication are affective expression and affective involvement. These two features recognize the emotional element in communication and reflect the degree of comfort with intimacy in the couple's relationship.

Effective couple communication is highly associated with couple intimacy and attachment. The relationship between couple intimacy and attachment has been investigated empirically by Brennan, Clark and Shaver (1998). Theoretically, intimacy in a couple relationship is described by the amount of avoidance of closeness and the amount of anxiety that arises from closeness in an adult attachment (Brennan et al., 1998). The two dimensions of anxiety and avoidance underlie virtually all self-report adult attachment measures and appear crucial for capturing important individual differences in adult attachment. Individual differences in adult attachment behavior are reflections of the expectations and beliefs people have formed about themselves and their close relationships on the basis of their early in life attachment histories (Crowell, Fraley & Shaver, 1999). According to Hazan and Shaver (1987) working models of attachment continue to guide and shape close relationship behavior throughout life. As people build new relationships, they rely partly on previous expectations about how others are likely to behave and feel towards them, and they use these models to interpret the goals or intentions of their partners. The theory suggests that early caregiving experiences

influence how people behave in their adult relationships and their experiences of intimacy. Potentially one of the highest forms of couple intimacy between a married couple is intentional prayer (Giblin, 1993).

Couple intimacy and attachment as an expression of human relationships represent a subset of one's overall sense of psychological well-being (Ellison, 1983; Paloutzian & Ellison, 1982). A person's sense of psychological well-being is a foundational element in self-identity and expresses a subjective sense of quality of life. Spiritual well-being represents a second subset of one's overall sense of psychological well-being. A person's sense of spiritual well-being can serve as a global psychological assessment of one's perception of self (Paloutzian & Ellison, 1982). Paloutzian and Ellison (1982) conceptualize spiritual well-being differently than spiritual health or spiritual maturity. Spiritual well-being is seen to arise from an underlying state of spiritual health and is an expression of it, much like the color of one's complexion and pulse rate are expressions of good health (Ellison, 1983). Spiritual well-being differs from spiritual maturity though it is expected that a spiritually mature person would experience a very positive sense of well-being. Yet a person newly awakened to the spiritual dimension may experience a very positive sense of spiritual well-being but at a lower level of spiritual maturity (Ellison, 1983). Spiritual well-being describes a state of being while spiritual maturity describes a developmental process. Spiritual well-being involves transcendence by focusing on well-being in relation to that which lies beyond oneself. Moberg (1978) has conceptualized spiritual well-being as two-faceted, with both vertical and horizontal components. The vertical dimension refers to our sense of well-being in relation to God. The horizontal dimension refers to a sense of life purpose and

life satisfaction, with no reference to anything specifically religious. In a marriage each spouse's spiritual sense of well-being is experienced by the other and is manifested in the dyadic communication and intimacy comfort. A study by Ellison (1983) found that the average amount of time spent per daily devotion (prayer) was significantly related to overall spiritual well-being. Intentional prayer can be a reflection of each spouse's level of spiritual sense of well-being.

As noted above, spiritual well-being differs from spiritual maturity. Spiritual well-being describes a state of being while spiritual maturity describes a developmental process (Paloutzian & Ellison, 1982). Married couples' spiritual and religious maturity levels are reflections of the developmental growth of the human spiritual dimension (Dudley and Cruise, 1990; Ellison, 1984). For example, Bufford (as cited in Basset et al., 1991) found a direct relationship between spiritual maturity and intrinsic faith and an inverse relationship between spiritual maturity and extrinsic faith. Extrinsic faith or religion is an orientation that merely uses religion as a means to gain other personal goals. Intrinsic faith or religion is an orientation that defines religion as a controlling force in life consisting of a set of internalized principles that guide all interactions (Allport, 1960, 1966; Allport & Ross, 1976; Dudley & Cruise, 1990). An alternative but similar formulation is the difference between consensual and committed religion described by Allen and Spilka (1967). Measurement of spiritual maturity and religious maturity from the psychological perspective informs questions concerning prayer and its potential in positively affecting interpersonal relationships. Spirituality and its externalized expression in religion are seen as essential aspects of the human experience in its continuous developmental process and shape a couple's perception of their

relationship. Spiritual and religious maturity levels indicate how people of differing maturity levels benefit differently from the use of intentional prayer.

Finally, the essential element of this study is prayer. Yet, just what is this phenomenon called prayer? William James (1902/1936) defines it as “every kind of inward communication or conversation with the power recognized as divine” (p. 454). Meadow and Kahoe (1984) assert that prayer can be offered in spoken or unspoken form. Prayer is taught as a value and a spiritual tool by all Western world religions and by several of the Eastern religions (Richards & Bergin, 1997). Prayer can take a variety of different forms. Dossey (1993) conveys that the word

“Prayer” comes from the Latin *precarius*, “obtained by begging,” and *precarī*, “to entreat”-to ask earnestly, beseech, implore. This suggests two of the commonest forms of prayer-petition, asking something for one’s self, and intercession, asking something for others. There also are prayers of confession, the repentance of wrongdoing and the asking of forgiveness; lamentation, crying in distress and asking for vindication; adoration, giving honor and praise; invocation, summoning the presence of the Almighty; and thanksgiving, offering gratitude. (p. 7)

Butler and Harper (1994) report that religious couples often believe that God is stabilizing interpersonal relationships and engaged in daily family transactions. These religious couples often dialogue informally with God throughout the day and invoke God’s participation and guidance in the day’s marital interactions. Consequently, for the religious couple daily conversations with God through prayer for the relationship result in God functioning as a crucial family and marital member. Richards and Bergin (1997) affirm “there is no doubt that people who pray do believe that prayer helps them physically and psychologically. Whether this is because of the placebo effect, the ‘relaxation response,’ the power of the mind-body connection, or a transcendent healing influence remains scientifically uncertain” (p. 202). This study seeks to explore the

elusive activity of human prayer and its influence on Christian married couple's perception of their relationship.

Significance

This study may prove valuable for practitioners, clients and research purposes. Practitioners of marriage and family therapy may benefit from this study by being provided the potentially therapeutic and heuristic tool of intentional prayer in their service to their clients. As indicated by a growing awareness in the medical field the use and significance of prayer as a therapeutic tool needs to be explored by marriage and family counselors (Anderson & Worthen, 1997; Butler & Harper, 1994; Finney & Malony, 1985; Griffith, 1986). To be unaware of the spiritual aspects of marriage and the tools, such as prayer, that can be employed to affect the marital relationship would limit the effectiveness of any therapeutic caregiver (Stander, Piercy, Mackinnon & Helmke, 1994). The marital therapist who recognizes the importance of prayer to religious couples may locate a necessary and unexpected resource for restructuring the marital relationship (Anderson & Worthen, 1997). Marital therapists working with religious couples may discover a more powerfully therapeutic view of the interactional process as they consider how the couple communicates with God as a third partner in the marital system (Butler & Harper, 1994; Ross, 1994). Where marital conflict is characterized by defensiveness and protectiveness, spirituality as expressed in prayer calls partners to openness, acceptance of one's brokenness, and vulnerability (Giblin, 1993). Additionally, Simon (1990) suggests that a greater openness to spirituality and prayer may benefit the mid-career uncertainties of marriage and family therapists of the current Baby Boomer generation.

In terms of clients, this research study may indicate positive benefits of the use of intentional prayer for Christian married couples who wish to improve their relationship, and may potentially be generalized to other married couples (Anderson & Worthen, 1997). Christian married couples taught to use intentional prayer by marriage and family therapists may benefit by communicating about their relationship in a new and different way. Poloma and Pendleton (1991) state, "Although some 90% of all Americans claim to pray, a review of social science literature will reveal that researchers have shown little interest in the topic" (p. 71). This present study would be an investigation of an activity that is important to most clients and has been understudied. Finney and Maloney (1985) urge, "The subject is of such importance that prayer research should proceed." (p.113)

In terms of research, this study is an application of Gorsuch's (1984) idea of using new paradigms to address measurement of the human spiritual dimension. Clearly, in the historic scientific community, the therapeutic literature and marriage and family counselors have not paid attention to the reality of the spiritual awareness and experience of the American population (Anderson & Worthen, 1997; Bergin, 1992; Genia, 1992; Ross, 1994; Stander, Piercy, Mackinnon & Helmeke, 1994). This study could potentially help close the gap between the mechanistic moorings of science and the reality of a human spiritual dimension.

Research Questions

The following research questions will be examined in this study:

- A) Does intentional prayer improve the quality of Christian married couples' relationships?
 - 1. Does participation in intentional prayer increase Christian married couples' perception of the quality of their interpersonal communication?

2. Does participation in intentional prayer increase Christian married couples' perception of the expression of affect in their relationship?
3. Does participation in intentional prayer increase Christian married couples' perception of the quality of affective involvement in their relationship?
4. Does participation in intentional prayer decrease Christian married couples' perception of the avoidance of emotional intimacy in their relationship?
5. Does participation in intentional prayer decrease Christian married couples' perception of the anxiety about emotional closeness in their relationship?
6. Does participation in intentional prayer increase Christian married couples' perception of their religious well-being?
7. Does participation in intentional prayer increase Christian married couples' perception of their existential well-being?

B) Are there specific characteristics that help to explain differences in the quality of the marital relationship among couples who used intentional prayer?

1. Do the characteristics of spiritual maturity, years married, number of children, and number of children in home explain the differences in the perception of interpersonal communication for Christian married couples who used intentional prayer?
2. Do the characteristics of spiritual maturity, years married, number of children, and number of children in home explain the differences in the perception of expression of affect in their relationship for Christian married couples who used intentional prayer?
3. Do the characteristics of spiritual maturity, years married, number of children, and number of children in home explain the differences in the perception of the quality of affective involvement in their relationship for Christian married couples who used intentional prayer?
4. Do the characteristics of spiritual maturity, years married, number of children, and number of children in home explain the differences in the perception of avoidance of emotional intimacy in their relationship for Christian married couples who used intentional prayer?
5. Do the characteristics of spiritual maturity, years married, number of children, and number of children in home explain the differences in the

perception of anxiety about emotional closeness in their relationship for Christian married couples who used intentional prayer?

6. Do the characteristics of spiritual maturity, years married, number of children, and number of children in home explain the differences in the perception of religious well-being for Christian married couples who used intentional prayer?
7. Do the characteristics of spiritual maturity, years married, number of children, and number of children in home explain the differences in the perception of existential well-being for Christian married couples who used intentional prayer?

Limitations of the study

The participants in this study cannot be considered truly random for the following reasons: (a) all participants were self-selected to participate; (b) participants are primarily from a small urban population in the southeastern United States; (c) participants are only heterosexual Christian married couples; (d) paper and pencil measurement instruments are used rather than direct observance of behavior. The method of sampling limits the generalizations of the study to the groups used. In addition, according to Webb, Campbell, Schwartz, and Sechrest (1966) the method of self-reporting information is retrospective in nature and subject to bias.

Definitions

In this study the following terms are defined as follows:

Anxiety: fear of abandonment, as with a person who worries about the equity of a relationship and worries about the commitment level of the relationship partner.

Avoidance of emotional intimacy: discomfort with closeness and dependence as with a person who is uncomfortable in situations that are characterized by close interpersonal relationships and mutual dependence.

Communication: the achievement of mutual understanding, so that the message received is the same as the message intended.

Existential well-being: how well a person is adjusted to self, community, and surroundings.

Prayer: communication with a Higher Being.

Religious maturity: the manner in which one manages the creative tension between sincere commitment and a tentative open-mindedness.

Religious well-being: a dimension of a person's life as it is expressed in relationship to God.

Spiritual maturity: a complex set of behaviors that orient one to act in specific ways in relationships based upon a personal set of beliefs, a keen perception of reality, creativity, being self-principled and willing to make sacrifices for the welfare of others.

CHAPTER 2

REVIEW OF RELATED LITERATURE

Until recently researchers in the helping professions have chosen not to explore the realm of human spirituality (Bergin, 1992; Ellison & Smith, 1991; Finney & Malony, 1985; Griffith, 1986; Poloma & Pendleton, 1991; Sirch-Stasko, 1996; Walsh, 1999). Historically, spirituality has been seen as being opposed to the scientific way of thinking. This perspective has limited the view of counseling toward spirituality and more particularly toward the practice of prayer as an expression of human spirituality (Bergin, 1992; Dossey, 1993; Ellison & Smith, 1991; Greeley, 1991; Griffith, 1986). Generally, spirituality and prayer have been under studied in therapeutic literature (Barnhouse, 1979; Bergin, 1992; Griffith, 1986; Matthews, 1998; Poloma & Pendleton, 1991; Torrey, 1986; Walsh, 1999). The historical disinclination of mental health professionals to investigate human spirituality notwithstanding, there is a growing body of literature that addresses this topic. The purpose of this chapter is to provide a review of that literature. The literature reviewed for the purposes of this study is organized as follows: investigations of spirituality, prayer and well-being; couple communication; spiritual maturity and spiritual well-being; and summary.

Investigations of Spirituality, Prayer and Well-Being

There is a disparity between people's views about the centrality of spirituality in their lives, as expressed in prayer, and the attention it has received from behavioral researchers (Anderson & Worthen, 1997; Poloma & Pendleton, 1991; Richards & Bergin,

1997; Ross, 1994; Stander, Piercy, Mackinnon & Helmeke, 1994). A number of researchers (e.g., Greeley, 1991; Sheler, 1994; Poloma & Pendleton, 1991; Walsh, 1999; Woodward, 1997) have reported that people acknowledge an appreciation of the spiritual dimension of prayer in their lives. In contrast, behavioral researchers have not elected to focus on such matters (Gorsuch, 1984). Notwithstanding the historic tradition, there is now emerging a body of research that is investigating spirituality and prayer and how it relates to physical (Dossey, 1993; Matthews, 1998; Schlitz & Lewis, 2001; Sicher, Targ, Moore & Smith, 1998; Targ, 1999; Volz, 1999) and psychological well-being (Chamberlain & Hall, 2000; Poloma & Pendleton, 1991; Stander, Piercy, Mackinnon & Helmeke, 1994; Walsh, 1999; Warfield & Goldstein, 1996).

Physical Well-Being

There is a new openness to spirituality and prayer occurring in scientific studies being conducted in the field of medicine (Matthews, 1998; Targ, 1999). According to Volz (1999) there are presently about 150 studies on prayer and health taking place in the United States. Medical studies are showing that prayer is effective in promoting physical recovery and healing of the body (Byrd, 1988; Harris, Gowda, Kolb, Strychacz, Vacek, Jones, Forker, O'Keefe & McCallister, 1999; Matthews, 1998; Schlitz & Lewis, 2001; Targ, 1999). For example Byrd (1988) conducted a double-blind longitudinal study that investigated the effectiveness of prayer on physical recovery for cardiac patients. Over 10 months, 393 patients admitted to the coronary care unit of San Francisco General Hospital were assigned randomly to one of two groups: prayer group and non-prayer group. Patients in the prayer group, received daily prayer (as long as the patient was in the hospital) from three to seven Christians who were remotely situated to the hospital.

Patients did not know they were being prayed for. Those who prayed knew the patient's first name, diagnosis, and general condition, and they received periodic updates on the patient's condition. Patients in the non-prayer group, were not recipients of daily prayer. Physicians did not know which patients were in which group, nor did the investigator of the study, who collected and analyzed the patient outcome data. Dependent variables included the following: days in the critical care unit, days in the hospital, number of medications at discharge, development of new symptoms, and rated course of treatment as outcomes. Patients who were prayed for did substantially better than did patients who were not prayed for. The severity score showed that the prayer group had an overall better outcome ($p < .01$) and the multivariate analysis produced a p value of $< .0001$ on the basis of the prayer group's lesser requirements for antibiotics, diuretics, and intubation-ventilation (Byrd, 1988).

Harris et al. (1999) attempted to replicate Byrd's (1988) findings by testing the hypothesis that cardiac patients who were unknowingly and remotely prayed for by intercessors who did not know them would experience fewer complications and have a shorter hospital stay than patients not receiving such prayer. The design was a randomized, controlled, double-blind, prospective, parallel-group trial. The setting was a private, university-associated hospital and included nine hundred and ninety ($N = 990$) consecutive patients who were newly admitted to the coronary care unit. At the time of admission, cardiac patients were randomized to receive remote, intercessory prayer (prayer group) or not (usual care group). The first names of patients in the prayer group were given to a team of outside intercessors who prayed for them daily for four weeks. Patients were unaware that they were being prayed for, and the intercessors did not know

and never met the patients. The medical course from coronary care unit (CCU) admission to hospital discharge was summarized in a CCU course score derived from blind, retrospective chart review.

The CCU course score was based on the incidence of observed medical conditions that are associated with coronary illness and/or the types of medical interventions performed on the patients. Compared with the usual care group ($N = 524$) the prayer group ($N = 466$) had lower mean weighted (6.35 vs 7.13; $p = .04$) and unweighted (2.7 vs 3.0; $p = .04$) CCU course scores. Lengths of CCU and hospital stays were not different. Harris et al. concluded that remote, intercessory prayer was associated with lower CCU course scores and this result suggests that prayer may be an effective adjunct to standard medical care.

In another investigation of prayer and physical well-being Sicher, Targ, Moore, and Smith (1998) report on a double-blind randomized study of distant healing (prayer) with 40 patients with advanced AIDS. Subjects were matched for age, T-cell count, and number of AIDS-defining illnesses and randomly assigned to either 10 weeks of distant healing treatment or a control group. Distant healing prayer treatment was performed by self-identified healers representing many different healing and spiritual traditions. Healers were located throughout the United States during the study, and subjects and healers never met. Subjects were assessed by psychometric testing and blood draw at enrollment and followed for 6 months. At 6 months, a blind medical chart review found that treatment subjects acquired significantly fewer new AIDS-defining illnesses (0.1 versus 0.6 per patient, $p = 0.04$), had lower illness severity (severity score 0.8 versus 2.65, $p = 0.04$), and fewer days of hospitalization (0.5 versus 3.4, $p = 0.04$). Treated

subjects also showed significantly improved mood compared with controls (Profile of Mood States score -26 versus 14, $p = 0.02$). There was no significant differences in T-cell counts. Sicher et al. (1998) concluded these data support the possibility of a distant healing effect in AIDS patients and suggested the value of further research.

Ashby and Lenhart (1994) investigated prayer as a coping mechanism in a group of 105 persons (average age 45) experiencing chronic pain. Assessment instruments for pain included the Medical Coping Modes Questionnaire and two subscales of the West-Haven-Yale Multidimensional Pain Inventory. Prayer was measured by the Diverting Attention Praying-Hoping Subscale of the Coping Strategies Questionnaire. An evaluation of the results indicated individuals who endorsed a greater use of prayer to cope with their pain also reported a greater degree of disability. Follow-up analyses suggested that prayer was associated with diverting attention from pain, suggestive of a passive coping response.

Benor (1992) conducted a review of the research literature dealing with distant healing, including at least 131 laboratory-published studies of which 56 found significant effects ($p = <.01$). The studies ranged from hypertension (Miller, 1982), tension headache (Keller & Bzkek, 1986), anxiety (Heidt, 1997) to skin wound healing (Wirth, 1989). Many of the studies, however, lacked rigorous control, measured only responses *in vitro*, involved only brief periods of influence, or did not include extended follow-up (Sicher et al., 1998).

The relationship between prayer and physical well-being also has been examined in other ways by other investigators. For example, Begley (2001) reports on the increasing interest of scientists in the new field of neurotheology which is the study of the

neurobiology of religion and spirituality as investigated by Austin (1998). Scientists are using brain-imaging data to identify what seems to be the brain's spirituality circuit and to explain how it is that religious rituals have the power to move believers and nonbelievers alike. In neurotheology, psychologists and neurologists try to pinpoint which regions of the brain turn on, and which turn off, during experiences that seem to exist outside of time and space. With neuro-imaging researchers try to identify the brain circuits that surge with activity when we think we have encountered the divine, and when we feel transported by intense prayer, an uplifting ritual or sacred music. Researchers use a single proton emission computed tomography (SPECT) machine to capture a brain image of a radioactive tracer injected into an IV line of a participant experiencing a peak spiritual experience. The SPECT images are as close as scientists have come to snapping a photo of a transcendent experience. Initial findings indicate that for a spiritual experience to occur, brain regions that orient one in space and mark the distinction between self and world must go quiet. It is thought that religious experiences are evoked by mini electrical storms in the temporal lobes. The scientific researcher's newfound interest in neurotheology reflects a change of attitude by psychology and neuroscience toward religion and spirituality.

Psychological Well-Being

The newfound interest of scientific researchers in religion and spirituality is seen in the increasing body of research that is examining the relationship between prayer and psychological well-being. For example, Greeley (1991) reports on the results of a national telephone survey of 2,949 married adults concerning intimacy in their marriage and found that 32% of the couples often prayed together. Greeley analyzed survey data

from four independent samples of randomly selected American married couples who were categorized on the basis of frequency of prayer. Couples were also asked to rate the quality of their marriage by indicating the degree of happiness in it. According to the respondents, 75% of those who often prayed together said that the marriage was very happy, as opposed to 57% of those who prayed less often. Eighty-eight percent of the prayers said that the spouse was also their best friend, as opposed to 71% of those who pray less often. Nine out of ten of the prayers said they would marry the same person again, as do four out of five of those who do not pray together so often. Greeley concluded that for the investigated samples joint prayer was strongly related to marital happiness. Prayer, it is worth noting, was a much more powerful predictor of marital satisfaction than frequency of sexual intercourse—though the combination of sex and prayer correlated with very, very high levels of marital fulfillment. Whether they often prayed together was a very powerful correlate of marital happiness.

Greeley found that other advantages accrued to couples who often prayed together versus those who did not. The advantages were observed for almost every variable being analyzed in the Greeley study: respect (83% versus 62%), distrust (5% versus 9%), helping with household tasks (73% versus 61%), discussion of state of the marriage (76% versus 60%), belief that the spouse was good with children (89% versus 78%), agreement on raising children (73% versus 59%), playfulness (56% versus 45%), conviction that the spouse was a skilled lover (62% versus 49%), frequent partying (36% versus 28%). It may be that the prayer interlude provided husbands and wives with time away from the other responsibilities of their common and individual lives in which they could share affection and common values and thus reinforce their relationship. Greeley did not test

for significant differences in the reported data, and given the magnitude of some of the differences it is important to exercise caution in interpreting the data. Nevertheless, Greeley's data suggested that prayer may be a powerful correlate of marital satisfaction.

Another example of prayer and psychological well-being was a study done by Poloma and Pendleton (1991). The study consisted of 560 adults randomly sampled in the Akron, Ohio area who were selected for telephone interviews using a random digit dialing method activated by a Computer Assisted Telephone Interviewing (CATI) system. This sample included 532 (95%) who claimed a religious affiliation. Of these, 287 were Protestant (54%), 133 were Catholic (25%), 69 were other Christian (13%), 5 were Jewish (1%), 5 were Orthodox (1%), 33 were unreported (6%). The design was a correlational questionnaire measuring subjective well-being and religious practices. After controlling for education, gender, race, income, and age, prayer frequency was positively related to existential well-being and religious satisfaction and negatively related to happiness. Religious experience (i.e., the feeling of spiritual connection with the divine) during prayer was positively related to general life satisfaction, existential well-being, happiness, and religious satisfaction. After controlling for religious commitment, most relationships between prayer variables and subjective well-being variables became nonsignificant.

The results of this study indicated that different types of prayer may have different effects. For example, meditative prayer is devotional and usually engaged in as a form of worship. Petitional prayer (or intercessory prayer) is aimed at alleviating a particular suffering, one's own suffering, or the suffering of another. Ritual prayer is repetitive and may have either calming effects or negative psychological and physical

effects (depending on the person and situation). Colloquial prayer is like a conversation with God, in which the person may seek guidance or forgiveness or simply talk with God about positive or negative experiences. Ritual prayer was positively related to negative affect, and colloquial prayer was positively related to happiness. Poloma and Pendleton (1991) concluded that religiosity and prayer contributed without question to one's quality of life and perceptions of well-being.

In an another study of prayer and psychological well-being Gruner (1985) investigated the relationship between religious married couples' private religious devotional practices and marital adjustment. The investigation was developed to test the oft-heard cliché "the family that prays together stays together." The sample consisted of 208 married couples from Catholic and Protestant churches in the greater Los Angeles area. Using Mead's (1971) Handbook of Denominations in the United States Gruner assigned participants to one of four groups: sects (e.g. Pentecostal), conservative (e.g. Southern Baptist), liberal (e.g. United Church of Christ), and authoritarian (e.g. Roman Catholic) religions. The couples consisted of volunteers who were identified as being actively involved in their church, as verified by their pastor.

A pretest-posttest design was used to evaluate scores on psychological measures from the Wallace Marital Adjustment Test (Straus, 1969). The independent variables of the study were religious affiliation, prayer use, Bible reading, and marital adjustment. The relationship of marital adjustment and frequency of prayer use in solving couple problems was significant ($p < .001$). The investigators examined the relationship between marital adjustment and frequency of prayer and discovered that the majority (53%) of those with high marital adjustment used prayer almost all the time. In contrast, fifteen

percent of those with high marital adjustment did not use prayer as a means of addressing problems. Gruner posits the data suggest a positive relationship between private religious practice and marital adjustment scores thereby supporting the hypothesis. Gruner points out that a major weakness of this study is the lack of a control sample of non-religious people. Also the "sample" is not representative of any population and may be highly biased, since only church-going couples were chosen.

Yet another study of prayer and psychological well-being was performed by Butler, Gardner, and Bird (1998). Participants were 13 couples who had been married at least 7 years and who were characterized as "religious" by a close acquaintance. Participants lived in Utah (20), Washington (4), and Arizona (2). The sampling strategy was based primarily on accessibility to the researchers and secondarily on achieving representativeness. The qualitative methodology which consisted of structured interviews with open-ended questions of each spouse was used to investigate effects of prayer on couple interaction during conflict. A reliable description of the dynamics of prayer across spouse interviews was extracted by four analysts using a group interpretive procedure. Findings suggested that prayer invoked a couple-God system, which significantly influenced couple interaction during conflict. Overall, prayer appeared to be a significant "softening" event for religious couples, facilitating reconciliation and problem solving. Prayer 1) invoked an experience of relationship with Deity; 2) deescalated hostile emotions and reduced emotional reactivity; 3) enhanced relationship and partner orientation and behavior; 4) facilitated empathy and unbiased perspective; 5) increased self-change focus; and 6) encouraged couple responsibility for reconciliation and problem solving. In summary, couples' indications regarding the sequencing of prayer in their

repertoire of conflict interventions supports a recommendation of prayer for religious couples as an intervention when navigating serious, clinical conflict. Butler et al. concede that the limitations associated with the qualitative methodology of this study make the conclusions suggestive rather than definitive. The generalizability of the findings is thus uncertain.

Maltby, Lewis and Day (1999) investigated the role of religious orientation and psychological well-being, and examined the theoretical view that religion can act as a coping mechanism. Participants were administered questionnaire measures of three aspects of religious orientation (intrinsic, extrinsic, spiritual quest), frequency of personal prayer and church attendance, alongside measures of depressive symptoms, trait anxiety and self-esteem. The authors suggested the two following conclusions: (1) that the correlation between a number of measures of religiosity and psychological well-being may be mediated by the relationship between frequency of personal prayer and psychological well-being; (2) that personal prayer may be an important variable to consider within the theory of religious coping.

Stavros (1998) investigated how the practice of a particular contemplative prayer may affect a person's well-being and relationships, including that person's perceived relationship with God. Specifically, Stavros asked, does practicing the Jesus Prayer affect a person's perceived relationship with God, relationships with others, self-cohesion, anxiety, depression, hostility, and interpersonal sensitivity? The treatment group ($n = 44$) was instructed to practice the Jesus Prayer (Lord Jesus Christ, have mercy on me) ten minutes daily for thirty days. The control group received no treatment. Measures were given at the beginning and end of the thirty days to both the experimental and control

group. The treatment group's adjusted post-test means on measures of depression, anxiety, hostility, and interpersonal sensitivity were significantly lower than those of the control group. There were no statistically significant differences between treatment and control groups on measures of overall faith maturity, relationships with others, and self-cohesion. Stavros suggested that the practice of prayer enhanced a person's perceived relationship with God and also contributed to a person's health.

Chan (1995) investigated the use of prayer as a coping strategy in dealing with state-trait anxiety. The results of this study with college students indicated that subjects (N = 101) who prayed about their current most anxiety provoking life events for 10 minutes in a controlled condition reported significantly more immediate state-anxiety reduction, as compared with a control group that wrote about the event to a best friend, and with another control group that read and wrote about inspirational stories. Further, the degree of anxiety reduction was sustained after a one-week praying activity. No significant findings were found between the degree of anxiety and the likelihood of using prayer as a coping strategy.

Couple Communication

Anderson and Worthen (1997) suggest that spirituality can serve as a resource in couple therapy. They posit that different therapies pay attention to different dimensions of human experience. Three dimensions of experience addressed by most therapies are time (events occurring in sequences), space (experience organized through the structure of relationships), and story (the use of language to shape what has occurred in time and space into structure of meaning). The latter includes stories told inside our heads, stories told to others with whom we interact in time and space, stories that families construct and

pass on over generations, and stories constructed by societies and cultures. Strategic therapies emphasize the time dimension, and structural therapies the space dimension. Story is a central interest of intergenerational family therapies and those therapies in the postmodernist and social constructivist tradition. Therapies preferring attention to time and space take an interventionist form; those preferring story, a conversationalist form. Proponents of these different therapeutic approaches attend to different dimensions of experience because they operate from different basic assumptions about human nature and interaction, and about how change happens.

Anderson and Worthen (1997) suggest therapists whose work reflects a spiritual orientation may be influenced by three additional basic assumptions. The first holds to a belief in a fourth dimension of human experience that includes awareness of the existence of a God or Divine Being. The second sees human beings as having a yearning for connection with this Divine Being. The third views this Being as taking an active interest in human beings and acting upon their relationships to promote beneficial change. The fourth dimension is interwoven throughout the other three dimensions in such a way that every human relational event can be viewed as spiritual. For example, the deepening love between two persons in marriage may be seen as a reflection of the presence of divine love; indeed, marriage can be the most intense of all spiritual communities (Boyer, 1984). Anderson and Worthen (1997) posit that spirituality has to do with how persons orient their lives in light of their inner awareness. They define spirituality as subjective engagement with the fourth dimension of human experience transcendent of the limitations of time, space, and language. Engagement with the fourth dimension enhances human life and leads to corresponding behavior. Such behavior extends into every facet

of life and may or may not include the practice of a particular religion. Human life and behavior is enhanced by engaging the fourth dimension and viewing the infinite God as penetrating actively into finite time, space, and story, loving human beings and challenging them to learn to love themselves and others. This activity of the Divine can be seen as taking place or abiding within relationships, as in spiritual traditions in which the Divine is viewed as immanent as well as transcendent.

Hart (1994) suggests that the problems people bring to therapy always have a spiritual dimension, of which people are often dimly aware. He posits that therapy is much richer when it calls attention to the spiritual dimension, and addresses human struggles both psychologically and spiritually. Hart suggests that sound psychology and sound spirituality seek a common goal: human healing, growth, well-being, and fulfillment. In that endeavor, spirituality offers the larger, more ultimate framework of value, meaning, and power. Hart contends that each of these important fields needs the other's enrichment and the other's insights to help people find what they most deeply want. Hart proposes that psychology and spirituality are not separate realms, and certainly not opposed realms; they exhibit extensive overlap.

Within the context of family counseling, relational theories emphasize the importance of married couples communication (Brock & Barnard, 1992; Gladding, 1998; Gottman, Notarius, Gonso & Markman, 1976; Jacobson & Holtzworth-Munroe, 1986; Olson & McCubbin, 1983; Satir, 1972; Skinner, Steinhauer & Santa-Barbara, 1995; Steinhauer, Santa-Barbara, & Skinner, 1984). Effective communication is a central feature to the success of every marital couple. For example, effective communication is defined as the achievement of mutual understanding, so that the message received is the

same as the message intended (Skinner et al., 1995). If the message is clear, direct, and sufficient, then mutual understanding is likely to occur. The Process Model of Family Functioning as developed by Steinhauer et al. (1984) serves as a practical example of relational theory that includes constructs focusing on couple communication.

In terms of the process model Nichols and Schartz (1995) assert that all schools of family therapy have a theoretical commitment to working with the process of family interaction. Different systems of family therapy are more alike in practice than their theories would suggest. For example, family therapists of all persuasions are concerned with processes involved in clarifying communications among family members, overcoming resistance, and rectifying dysfunctional behaviors (Gladding, 1998). Two primary components of therapy are content and process. Content involves details and facts. Process focuses on how information is dealt with.

Examples of therapeutic models organized primarily around process are the McMaster Model of Family Functioning (Epstein, Baldwin & Bishop, 1983), the Family Categories Schema (Epstein, Rakoff & Sigal, 1968), and The Process Model of Family Functioning (Steinhauer et al., 1984). The Process Model of Family Functioning differs from the McMaster Model of Family Functioning (Epstein et al., 1983) and their common source, the Family Categories Schema (Epstein et al., 1968), by its increased emphasis on the dynamic interaction between the major dimensions of family functioning, and by its stress on the interface between intrapsychic subsystems and the interpersonal dimensions of the family system (Steinhauer et al., 1984). The Process Model of Family Functioning was the basis for the creation of The Family Assessment Measure (FAM). The basic concepts assessed by the FAM include the following: Task

Accomplishment, Role Performance, Communication, Affective Expression, Involvement, Control, and Values and Norms. The FAM was selected for this study because its constructs relate to the investigative questions concerning couple communication and affective expression and affective involvement.

Effective couple communication is an essential feature of the Process Model of Family Functioning and includes affective expression and affective involvement (Steinhauer et al., 1984). This model asserts that task accomplishment is the goal of every family. Tasks are understood as the demands of life that the family must organize itself to meet. Examples of family tasks include allowing for the continued development of all family members, providing reasonable security, ensuring sufficient cohesion to maintain the family as a unit, and functioning effectively as part of society. Successful achievement of a variety of basic, developmental, and crisis tasks is accomplished through clear communication. In the Process Model of Family Functioning two essential features of family communication are affective expression and affective involvement. These two features recognize the emotional element in communication and reflect the degree of comfort with intimacy in the couple's relationship.

In applying the Process Model of Family Functioning, Forman (1988) used the Family Assessment Measure (FAM) to assess perceived patterns of behavior exchange in distressed spousal relationships. Forman divided participants into those involved in a distressed relationship (N = 38) and those involved in a non-distressed relationship (N = 28). Participants were obtained from an outpatient clinic or a private practice and were all undergoing treatment for some type of relationship difficulty. Determination as to which relationships were distressed and which non-distressed was made on the basis of

scores obtained on the FAM dyadic adjustment scale (Spanier, 1976). The distressed group had significantly higher FAM self-rating scores (indicative of more problems) on several subscales: task accomplishment, role performance, communication, affective expression, involvement, control, and values and norms. The FAM subscales significantly discriminated between distressed and non-distressed relationships.

Woodside, Shekter-Wolfson, Garfinkel, Olmsted, Kaplan and Maddocks (1995) demonstrated the usefulness of the FAM in monitoring treatment effectiveness. Responses from a sample of ninety-one bulimic patients and their families were examined before and after treatment. Ratings of family functioning improved significantly over the course of treatment although ratings of patients and parents were different and complex. Woodside, Lackstrom, Shekter-Wolfson, and Heinmaa (1996) later also utilized the FAM in a longitudinal study. This study provides preliminary evidence of FAM sensitivity to more subtle and less substantive long-term therapeutic effects (Skinner, Steinhauer, & Sitarenios, 2000).

Recent studies support the effectiveness of the FAM in capturing therapeutic change. For example, Johannson and Tutty (1998) assessed families before and after intervention to improve functioning in families where physical and psychological abuse existed. They found significant improvement on the FAM as well as a variety of other measures.

The literature on the relationship between couple communication and marital satisfaction seem to parallel the observed relationship between prayer and marital satisfaction. Effective couple communication is an essential component of marital satisfaction (Forman, 1988; Steinhauer et al., 1984). Prayer (a form of communication)

has been also linked to marital satisfaction (Butler et al., 1998; Greeley, 1991; Gruner, 1985; Poloma & Pendleton, 1991). What is unknown is how other psychological variables that may inform counseling practitioners can influence the nature of the relationship. Important variables to consider include intimacy, spiritual maturity and spiritual well-being.

Effective couple communication is highly associated with couple intimacy and attachment. The relationship between couple intimacy and attachment has been investigated empirically by Brennan, Clark and Shaver (1998). Theoretically, intimacy in a couple relationship is described by the amount of avoidance of closeness and the amount of anxiety that arises from closeness in an adult attachment (Brennan et al., 1998). The two dimensions of anxiety and avoidance underlie virtually all self-report adult attachment measures and appear crucial for capturing important individual differences in adult attachment. Individual differences in adult attachment behavior are reflections of the expectations and beliefs people have formed about themselves and their close relationships on the basis of their early in life attachment histories (Crowell, Fraley & Shaver, 1999). According to Hazan and Shaver (1987) working models of attachment continue to guide and shape close relationship behavior throughout life. As people build new relationships, they rely partly on previous expectations about how others are likely to behave and feel towards them, and they use these models to interpret the goals or intentions of their partners. The theory suggests that early care giving experiences influence how people behave in their adult relationships and their experiences of intimacy. Potentially one of the highest forms of couple intimacy between a married couple is intentional prayer (Giblin, 1993).

Small (2000) conducted a study of the relationship between marital satisfaction and the type of romantic attachment experienced in a marital relationship. Eighty-seven married graduate business students completed the Dyadic Adjustment Scale (Spanier, 1976), the Attachment Level Inventory (Hazan & Shaver, 1990), and the Experiences in Close Relationship Inventory (Brennan, Clark, & Shaver, 1998), which measured their marital satisfaction and romantic attachment to their spouse. The findings of this study suggested that feelings of anxiety and ambivalence in regard to the marital relationship are positively related to marital dissatisfaction. In addition, the findings of this study suggest that the issues of regret, happiness, and frustration may be especially relevant in the development of marital dissatisfaction for persons who perceive themselves within the anxious or ambivalent and avoidant romantic attachment categories.

Morse (2000) examined the long-term effects of childhood sexual abuse on adult attachment relationships in a quantitative study on subjects ($N = 136$) from Ashland University and Ashland Theological Seminary in Ashland, Ohio. Adult survivors of childhood sexual abuse ($n = 68$) were compared to adults without a history of childhood sexual abuse ($n = 68$) utilizing the Experiences in Close Relationships Inventory (Brennan et al., 1998). Results indicated that abuse survivors are significantly (t -tests at $p < .01$) more avoidant in relationships, have greater discomfort with closeness, and a greater fear of abandonment.

Muderrisoglu (1999) reported that studies have found significant differences in the emotional reactivity and psychological functioning of adults with different attachment patterns. However, there is a dearth of empirical data linking attachment patterns to patterns of defensive functioning. Muderrisoglu's study examined the relationships

among attachment patterns to patterns of affective functioning (including levels of subjective distress, self-restraint, and reported emotions to stressful romantic situations) and defenses (including global defensiveness and use of specific defense mechanisms). One hundred and eighteen undergraduate students (61 males, 57 females) completed the following self-report measures: Bartholomew's (1998) Relationship Questionnaire; Brennan, Clark and Shaver's (1998) Experiences in Close Relationship Inventory; Muderrisoglu's (1999) Romantic Relationship Vignettes; Weinberger's (1997) Weinberger Adjustment Inventory; and Bond's (1995) Defense Style Questionnaire. Pearson correlations and multivariate analyses of variance revealed significant relationships among attachment patterns, defense styles and affective experiences in romantic relationships. As expected, securely attached individuals reported significantly lower subjective distress than insecurely attached individuals. The securely attached individuals tended to use more mature defenses and to be less impulsive in relationships, reporting less intense emotional reactions. Muderrisoglu concludes that knowing the emotional and defensive responses of individuals with different attachment patterns can inform the psychotherapy process.

To summarize, attachment and couple intimacy are highly associated with effective couple communication (Brennan et al., 1998), and as has been shown effective couple communication is an essential component of marital satisfaction (Forman, 1988; Steinhauer et al., 1984). Further, marital satisfaction has been positively associated to prayer (a form of communication) (Butler et al., 1998; Chamberlain & Hall, 2000; Greeley, 1991; Gruner, 1985; Poloma & Pendleton, 1991). Missing is any consideration

of differences among couple's marital satisfaction, intimacy and the effectiveness of prayer as a positive influence on the couple's perception of their relationship.

Spiritual Maturity and Spiritual Well-Being

Couple intimacy and attachment as an expression of human relationships represents a subset of one's overall sense of psychological well-being (Ellison, 1983; Paloutzian & Ellison, 1982). A person's sense of psychological well-being is a foundational element in self-identity and expresses a subjective sense of quality of life. Spiritual well-being represents a second subset of one's overall sense of psychological well-being. A person's sense of spiritual well-being can serve as a global psychological assessment of one's perception of self (Paloutzian & Ellison, 1982). Paloutzian and Ellison (1982) conceptualize spiritual well-being differently than spiritual health or spiritual maturity. Spiritual well-being is seen to arise from an underlying state of spiritual health and is an expression of it, much like the color of one's complexion and pulse rate are expressions of good health (Ellison, 1983). Spiritual well-being differs from spiritual maturity though it is expected that a spiritually mature person would experience a very positive sense of well-being. Yet a person newly awakened to their spiritual dimension may experience a very positive sense of spiritual well-being but at a lower level of spiritual maturity (Ellison, 1983). Spiritual well-being describes a state of being while spiritual maturity describes a developmental process. Spiritual well-being involves transcendence by focusing on well-being in relation to that which lies beyond oneself. Moberg (1978) has conceptualized spiritual well-being as two faceted, with both vertical and horizontal components. The vertical dimension refers to our sense of well-being in relation to God. The horizontal dimension refers to a sense of life purpose and

life satisfaction, with no reference to anything specifically religious. In a marriage each spouse's spiritual sense of well-being is experienced by their mate and is manifested in their communication and intimacy comfort. A study by Ellison (1983) found that the average amount of time spent per daily devotion (prayer) was significantly related to overall spiritual well-being. Intentional prayer can be a reflection of each spouses level of spiritual sense of well-being.

Roth (1988) investigated the relationship of spiritual well-being (defined as a well-integrated internal religious orientation) to marital adjustment. The subscale dimensions of satisfaction, cohesion, consensus, and affectual expression were used as indicators of adjustment as measured by Spanier's (1976) Dyadic Adjustment Scale. These scale scores were correlated with the religious, existential, and spiritual well-being scores from Paloutzian and Ellison's (1982) Spiritual Well-Being Scale. Subjects were 147 married individuals from churches in Southern California. Responses indicated that spiritual well-being correlated significantly to marital adjustment, with significant differences for years married. Those married 10-40 years showed a higher correlation than those married over 40 years. Existential well-being scores correlated highly with marital adjustment scores at most marital stages. Roth concludes that this study provided some empirical support for the hypothesis that spiritual well-being is an important factor in perception of marital happiness. In addition, Roth found that men and women differ significantly in their needs and experiences in integrating spiritual well-being at the various life cycle stages. A limitation of the study is that the findings cannot be generalized to the unchurched.

Thomson (2000) investigated spiritual well-being as one of six components of hospice patients' overall quality of life. Patients (mean age 72.1 years) admitted over a four month period were surveyed, using the Functional Assessment of Cancer Therapy Scale (Cella, 1993), at admission, one month later, three months later, and six months later. Data showed spiritual well-being to be an important contributor to overall quality of life. Thomson advocated that providing spiritual care to hospice patients makes good business sense.

As noted above, spiritual well-being differs from spiritual maturity. Spiritual well-being describes a state of being while spiritual maturity describes a developmental process (Paloutzian & Ellison, 1982). Married couples' spiritual and religious maturity levels are reflections of the developmental growth of the human spiritual dimension (Dudley & Cruise, 1990; Ellison, 1984). For example, Bufford (as cited in Basset et al., 1991) found a direct relationship between spiritual maturity and intrinsic faith and an inverse relationship between spiritual maturity and extrinsic faith. Extrinsic faith or religion is an orientation that merely uses religion as a means to gain other personal goals. Intrinsic faith or religion is an orientation that defines religion as a controlling force in life consisting of a set of internalized principles that guide all interactions (Allport, 1960, 1966; Allport & Ross, 1976; Dudley & Cruise, 1990). An alternative but similar formulation is the difference between consensual and committed religion described by Allen and Spilka (1967). Measurement of spiritual maturity and religious maturity from the psychological perspective informs questions concerning prayer and its potential in positively affecting interpersonal relationships. Spirituality and its externalized expression in religion are seen as essential aspects of the human experience

in its continuous developmental process and shape a couple's perception of their relationship. Spiritual and religious maturity levels indicate how people of differing maturity levels benefit differently from the use of intentional prayer.

TenElshof and Furrow (2000) noted that previous research on attachment relationships suggested that early parental interactions generate internalized models of self and others. These internalized models are carried forward in later relationships. To investigate the relationship between secure attachment styles and their collective influence on spiritual maturity, a survey of 216 seminary students was conducted using the Parental Bonding Instrument (Parker, Tupling, & Brown, 1979), Adult Attachment Scale (Feeley, Noller, & Hanrhan, 1994), and the Faith Maturity Index (Benson, Donahue, & Erickson, 1993). Secure adult attachment styles were predicted to relate positively with spiritual maturity. Findings suggested that adult measures of secure attachment styles were correlated with faith maturity. Correlation analysis was used to show the relationship between secure adult attachment and the three aspects of faith maturity measured by the Faith Maturity Index. The relationships between secure adult attachment and total faith maturity ($r = .46, p < .01$), vertical (directed toward the Divine) faith maturity ($r = .50, p < .01$), and horizontal (directed toward serving others) faith maturity ($r = .19, p < .01$) were all significant and in a positive direction. Measures of parental bonding evidenced minimal associations with adult attachment styles ($r = .13, p < .05$) and were weaker correlates of faith maturity. Secure adult attachment was a stronger predictor of faith maturity ($F = 7.46, p < .01$) when compared to measures of parental bonding. TenElshof and Furrow conclude that faith maturity was shaped and explained in part by current adult attachments over and above childhood attachments.

Cooke (1998) investigated the relationship between spiritual maturity and life satisfaction, and the extent to which age, marital status, income and education contributed to life satisfaction among middle-aged and older women. The relationship between spiritual maturity and religious affiliation was also explored. Ninety-four subjects aged 35 to 88 completed a demographic questionnaire, Genia's (1991) Spiritual Experience Index and Neugarten's (1961) Life Satisfaction Index-A. The results support a significant positive relationship between spiritual maturity and life satisfaction. Age did not predict spiritual maturity but education emerged as a statistically significant predictor of life satisfaction. Unaffiliated women and women affiliated with denominations less dominant in Western culture scored significantly higher on this measure of spiritual maturity than did Catholics and Protestants.

Cannon (1995) investigated the potential relationship between women's psychological and spiritual development. A sample of women ($N = 168$) from a diverse array of occupations and life styles, including less traditional (acupuncturists), moderately traditional (pastoral counselors), and more traditional (members of Christian churches in the Annapolis, Maryland, area) participated in the study. Loevinger's (1979) Sentence Completion Test was used as a measure of psychological maturity and Genia's (1991) Spiritual Experience Index was used as a measure of spiritual maturity. Multiple regression modeled relationships of spiritual maturity using age, education, marital status, participation in therapy, group affiliation, and psychological maturity. Secondary variables of religious affiliation and perceived nurturance from religious affiliation were also considered as factors. The only variables that significantly explained spiritual maturity were participation in therapy, group affiliation, and psychological maturity.

Participation in therapy was found to be the most important variable in explaining spiritual maturity. Group affiliation was strongly associated with religious affiliation. According to Cannon the data point to an emerging trend in which less traditional women seek to nourish their spirituality in less traditional ways (contemplation, yoga, meditation) instead of through organized religions.

As illustrated above, spiritual well-being and maturity can be represented as a subset of one's overall sense of psychological well-being (Ellison, 1983; Paloutzian & Ellison, 1982). In a marriage each spouse's spiritual sense of well-being is experienced by their mate and is manifested in their communication and intimacy comfort (Moberg, 1978). Further, psychological well-being, as well as physical well-being, and marital satisfaction have been positively associated with prayer (Byrd, 1988; Harris et al., 1999; Greeley, 1991; Gruner, 1995; Paloma & Pendleton, 1991). What is yet to be considered is the potential influence of prayer on a couple's perception of their relationship.

Summary

The foregoing review of related literature reflects the growing body of literature that addresses the wholistic human perspective that includes the dimension of spirituality. Helping professionals are increasingly viewing the inclusion of spirituality, and in some cases specifically prayer, as an essential element in serving the whole human being (Poloma & Pendleton, 1991). Spirituality and prayer are currently being explored in numerous studies that focus on the benefits to both physical and psychological well-being (Chamberlain & Hall, 2000; Volz, 1999). Prayer has been shown to be a significant factor in marital adjustment and happiness (Greeley, 1991; Gruner, 1985).

Helping couples adjust to the vicissitudes of their relational life is a major concern of marriage and family counselors. The purpose of this study is to investigate another tool that counselors may use in serving their clients. Specifically, this study will examine whether prayer improves married Christian couples' perception of the quality of their relationship. The critical questions to be addressed in this investigation are the following: When couples pray together, is their perception of the quality of their marital relationship modified and how? Related to this question, I am interested in answering two parallel questions. First, does couples' level of spiritual maturity differentially mediate the benefits of praying together? Second, are there specific characteristics among couples whose marital relationship improves as a result of the intervention and those who do not? The intent is to determine if the couples' perception of their relationship changed or not through the use of prayer.

CHAPTER 3 METHODOLOGY

Helping couples adjust to the vicissitudes of their relational life is a major concern of marriage and family counselors. Traditionally counselors have offered to couples therapeutic conversations, enrichment retreats, workshops and conferences as interventions to help them adjust to life's challenges together. The purpose of this study is to investigate yet another tool that counselors may use in serving their clients. Specifically, this study will examine whether prayer improves married Christian couples' perception of the quality of their relationship. The critical questions to be addressed in this investigation are the following: When couples pray together, is their perception of the quality of their marital relationship modified and how? Related to this question, I am interested in answering two parallel questions. First, does couples' level of spiritual maturity differentially mediate the benefits of praying together? Second, are there specific characteristics among couples whose marital relationship improves as a result of the intervention and those who do not? The intent is to determine if the couples' perception of their relationship changed or not through the use of prayer. The remainder of this chapter includes a discussion of the variables, participants, experimental design, procedures, data analyses and methodological limitations.

Dependent Variables

For the purpose of this study change in the quality of married Christian couples' relationship is the variable of interest. Given the complex nature of interpersonal

relationships, assessing changes in them presents researchers with a difficult task. In this study multiple dependent variables will be used to assess changes in specific aspects of a relationship. These variables include interpersonal communication, affective expression and affective involvement, avoidance in relationship, anxiety, and religious and existential well-being. The first five variables are seen as fundamental aspects of healthy marital relationships and determinants of functional individual and family development (Carter & McGoldrick, 1989; Gerson, 1991). The last two variables are recognized by personality theorists as related to emotional well-being (Ellison, 1983; Ellison & Smith, 1991; Paloutzian & Ellison, 1982; Paloutzian & Ellison, 1991).

Each of the dependent variables will be operationalized and assessed using sub scales of published measurement instruments. The Family Assessment Measure III (FAM III)(Skinner, Steihhauser & Santa-Barbara, 1995) will be used to assess communication, affective expression and affective involvement. Skinner et al. define communication as the exchange of information that is essential for couples to perform various essential tasks. The goal of effective communication is the achievement of mutual understanding so that the message received is the same as the message intended. An essential element of the communication process is the expression of affect, which can impede or facilitate task accomplishment. Through the use of affect communication is molded and shaped by feeling and emotion. Similarly, the kind of affective involvement family members have with one another can help or hinder task accomplishment. Affective involvement refers to both the degree and quality of family members' interest in one another.

The Experiences in Close Relationship Inventory (Brennam, Clark & Shaver, 1998) will be used to assess avoidance of emotional intimacy and anxiety about emotional closeness. For Brennam et al. avoidance of emotional intimacy is defined as discomfort with closeness and dependence. That is, a person who is uncomfortable in situations that are characterized by close interpersonal relationships and mutual dependence would have difficulty in participating freely and openly in a couple relationship. Anxiety is the reciprocal of avoidance and is presented as fear of abandonment. That is, a person worries about the equity of the relationship and worries about the commitment level of their relationship partner.

The Spiritual Well-Being Scale (Ellison, 1983) will be used to assess participants' religious well-being and existential well-being. Ellison defines religious well-being as a dimension of a person's spiritual life as it is expressed in relationship to God. Existential well-being, on the other hand, concerns how well the person is adjusted to self, community, and surroundings. This component involves the existential notions of life purpose, life satisfaction, and positive or negative life experiences.

Independent Variables

The independent variables used in this study will be spiritual maturity and religious maturity. Ellison's Spiritual Maturity Index (Ellison, 1983) will be used to assess participants' spiritual maturity. For Ellison, spiritual maturity involves a complex set of behaviors that, when considered together, orient one to act in specific ways in relationships. Specifically, a spiritually mature person is one who possesses a personal set of beliefs (as opposed to basing faith beliefs on the consensus of others), a keen

perception of reality, displays creativity in everyday life, is self-principled and willing to make sacrifices for the welfare of others.

The Religious Maturity Scale (Dudley & Cruise, 1990) will be used to assess religious maturity. According to Dudley and Cruise, religious maturity represents the manner in which one manages the creative tension between sincere commitment and a tentative open-mindedness, as opposed to doubt. The religiously mature individual believes, "I want to be ready to progress in my understanding when a new piece of the 'truth' becomes clear to me. In the meantime I will live by the light I have." (p. 101)

The intent in measuring spiritual and religious maturity is to determine how the couples may differentially benefit from participating in prayer. Prayer is understood to mean communication with a Higher Being. An important variable in making this determination will be the participants' belief about the helpfulness of prayer. It is expected that some participants will believe strongly that prayer is a ready source of help while others will be less positive. In order to account for these differences participants' views about the helpfulness of prayer will be considered as a covariate and assessed using the Helpfulness of Prayer Scale (Saudia, Kinney, Brown, & Young-Ward, 1995).

Participants

The participants of this study will consist of married heterosexual couples drawn from churches of varying Christian denominations in central Florida. The sample will include a minimum of 100 volunteer couples (200 individuals) who participate in Christian worship services and who volunteer to participate. No attempt will be made to stratify the sample on the basis of the demographic variables (e.g., couple's ages, the

length of their marriage, or socio-economic status) because there is no evidence in the literature that demonstrates a relationship between these variables and practice of prayer.

The sample will be drawn from the inhabitants of Alachua County in central Florida. Alachua County is a major educational and health care center with a number of associated firms and industries. The County has a population of 211,403 and Gainesville, the major city in the County was rated among the top twenty “most liveable” cities in the United States for the past seven years.

Experimental Design

The experimental design for this study will be a pretest-posttest control group design with repeated measures and random assignment. This design allows for the comparison of a treatment group with a control group after the completion of the prescribed intervention. A visual representation follows in figure 1.

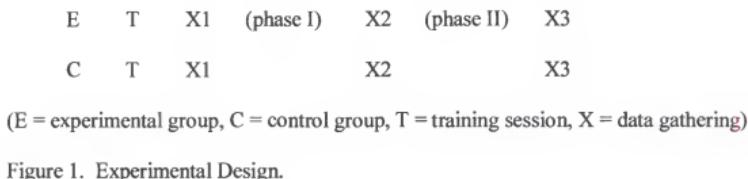


Figure 1. Experimental Design.

Consistent with the design, data will be collected from all participants prior to the intervention, at the end of the 30-day treatment period, and again at the end of a second 30-day treatment period. In the second treatment period, the treatment and control conditions will be reversed with the participants of the control group becoming the treatment group and the participants of the treatment group becoming the control group. Only the assessments obtained in phase one will be used to answer the research questions.

Procedures

Volunteer participant couples will be found in different denominational churches through an invitation (appendix A) and description of the study (appendix B) that will be inserted into their respective church bulletins. A meeting of all volunteer couples will be held in each church where informed consent forms (appendix C) will be explained and signed. The description of the study form will be read to all participants at the meeting. Permission to conduct the study will be sought from the University of Florida Institutional Review Board. The Institutional Review Board approval form can be found in appendix D.

Couples who sign and return the informed consent form will be assigned a five-digit identification number that will allow for the tracking of responses across assessments. The first two digits will be used to designate congregation, the next two digits will be used to designate the couple's number from each congregation, and the last digit will be used to identify each member of the couple, where the male of the couple will be assigned a number 1; the female of the couple will be assigned a number 2. So the number 01-01-1 tells us this participant is among those drawn from the first congregation, is a member of couple one of congregation one, and is male.

Treatment Procedures

The treatment for this investigation will be delivered in two phases, each 30 days in duration. In phase one invitations to participate in this research study will be placed in a congregation's Sunday bulletin. Interested couples will meet with me after the worship service to complete an orientation and brief training session, at which time they will be informed as to the intent of the study and their part in it. The volunteers will be told they

will be given identification numbers and randomly assigned to one of two groups.

Participants in both groups will complete an assessment packet at the beginning and the end of the 30-day phase one.

The purpose of this investigation is to determine whether intentional prayer influences couples' perceptions about the quality of their relationships. Thus, couples assigned to the experimental group will be asked to pray together on a daily basis to ask God to enrich and/or enhance their relationship. Couples may satisfy the experimental requirement through the use of free form prayer (appendix E) or by using a scripted prayer (appendix F) that will be provided. Both the example prayer and the outline for free form prayer will ask God to bless, affirm, love and value the mate of the one who prays.

During the orientation meeting the group will be randomly divided (as proposed by Borg & Gall, 1989) by having one member of the couple draw a red (experimental) or blue (control) chip out of a container. An associate will lead the control group to a separate room. The remaining experimental group will then receive a training session from a second associate. During the training session, participants will be provided with the opportunity to practice each form of prayer as follows. The trainer will read the example prayer and also model a free form prayer from the outline for the benefit of clarity for the experimental group. With couples in the experimental group, each partner in turn will be asked to then read the example prayer to their partner and provided the opportunity to discuss the procedure and ask questions. The experimental group couples will then be asked to practice a free form prayer from the outline.

Each couple in the experimental group will be given a tracking form (appendix G) with 30 places to enter the time of day (e.g., morning, afternoon, evening) they prayed, whether they used the example prayer or the outline prayer, and any short comments. The participants will be asked to attach the tracking forms to their bathroom mirror for ease of remembrance. Following the training session the trainer will administer the measurement instrument packet to the experimental group. Upon completion of the measurement instrument packet the experimental group will be free to leave.

Couples in the control group in another room will have the importance of their part of the experiment explained and emphasized. Couples in the control group will be asked to live their lives as they normally do for the next 30 days. My associate will then administer the measurement instrument packet to the control group. Upon completion of the measurement instrument packet the control group will be free to leave. At the end of phase one both the control group and the experimental group will meet again to complete the assessment packet and to collect the tracking form from the experimental group.

Phase two will begin immediately after the end of phase one, and will involve a reversing of the treatment condition. Specifically, the control group will now become the experimental group and those in the experimental group will now become the control group and be requested to simply resume their normal living pattern. Couples in the experimental condition will then receive the same training that was provided to experimental couples in phase one of the investigation. Upon completion of the 30-day phase two period both groups will meet for a third and final time to complete the assessment packet. I will then answer questions from the groups and thank them for their participation.

Measurement Procedures

Participants in the control and experimental groups will be given an instrument packet containing the five assessment instruments at the beginning of phase one and again at the end of phase one and two. The instrument packet will contain the following: Family Assessment Measure III (FAM III), Experiences in Close Relationships Inventory (ECRI), Helpfulness of Prayer Scale (HPS), Spiritual Well-Being Scale (SWBS), Religious Maturity Scale (RMS), Spiritual Maturity Index (SMI). Included in the packet will be a machine scoreable answer sheet and demographic information sheet (see appendix J).

A couple's level of communication, affective expression and affective involvement will be measured and operationalized by the corresponding subscales of the Family Assessment Measure III (FAM III)(appendix H). FAM III is based on the Process Model of Family Functioning (Steinhauer, Santa-Barbara & Skinner, 1984), which provides a conceptual framework for family assessments. This model asserts that the goal of a family is the successful achievement of a variety of basic, developmental, and crisis tasks (Task Accomplishment). Each task places demands on the family that the family must meet. These tasks include allowing for continued development of all family members, providing reasonable security, ensuring sufficient cohesion to maintain the family as a unit and functioning effectively as a part of society.

Successful task accomplishments include differentiation and performance of family roles. Role performance has three elements: 1. the assignment of specific activities to each family member, 2. the willingness of each member to assume the assigned roles, and 3. the carrying out of the assigned behaviors. The process of communication is used

to describe and assign the role tasks to be accomplished. Communication is successful when the message intended is the same as the message received.

An essential element of the communication process is the expression of affect. Affective communication can slow or accelerate aspects of task accomplishment and role integration. Along the same lines, the type of affective involvement can impede or facilitate task accomplishment. Affective involvement is the degree and quality of family members' interest in each other. Vital to the family is its ability to meet the emotional and security needs of its members (Skinner et al., 1995).

Family members influence each other through the process of control. The family needs to be able to maintain its ongoing functions and adapt to changing task demands. The Control subscale measures the family's quality of mutual influence. In this model values and norms are the background for all the basic processes. The values and norms would include whether family rules are explicit or implicit, the latitude allowed to decide attitudes and behaviors, and whether the family norms are consistent with the surrounding culture.

FAM III is a self-report instrument that provides quantitative indices of family strengths and weaknesses (Skinner, Steinhauser & Santa-Barbara, 1995). The general concepts measured by the FAM III are task accomplishment, role performance, communication, affective expression, affective involvement, control, and values and norms. These variables have been observed to be important determinants in healthy individual and family development (Carter & McGoldrick, 1989). The FAM III is made up of the three following components: 1. A General Scale (GS), which focuses on the family as a system; 2. a Dyadic Relationship Scale (DRS), which examines relationships

between specific pairs; and 3. a Self Rating Scale (SRS), which measures the individual's perceptions of his/her functioning in the family.

The assessment results provide raw scores for each subscale that can be transferred to a profile form indicating percentile and T-scores (appendix I provides a table with the GS, DRS and SRS subscales, item numbers and range of raw scores). Low T-scores (40 and below) are considered strengths. High T-scores (60 and above) are considered areas of weakness. Generally, the higher the individual's scale scores exceeds 60, the greater the likelihood of some relational disturbance.

For this study only the DRS will be used. The DRS is a 42 item self-report scale intended to measure selected aspects of the couple's relationship quality including task accomplishment, role performance, communication, affective expression, involvement, control, and values and norms, each represented as a sub-scale. For the purposes of this study the subscales of interest are communication, affective expression and affective involvement. As noted above, the process of communication is used to describe and assign the role tasks to be accomplished. Communication is successful when the message intended is the message received. Within this framework, low scores on the communication subscale reveal that communication is clear and direct and has an appropriate amount of information. High scores show that communications are insufficient in information and indirect. There is also a lack of mutual understanding among family members and an inability to get clarification when confused. An example of a communication subscale statement would be the following: I know what this person means when he or she says something.

Affective expression defines the tone and timbre of interpersonal communication. Low scores on the affective expression subscale show that family affective expression encompasses a full range of affect, and is appropriate and contains correct intensity. A high score reveals inadequate affective communication with insufficient expression and emotional inhibitions. An example of an affective expression subscale statement would be the following: I can tell when this person is upset.

Affective involvement pertains to the degree and quality of family member's interest in each other. Low scores on the affective involvement subscale indicate a high presence of emphatic involvement characterized by nurturance and support, fulfillment of emotional needs, and a general sense of security. A high score indicates the absence of affective involvement among family members. An example of an affective involvement statement would be the following: This person and I aren't close to each other.

The normative data for FAM III came from an analysis of 247 adults and 65 adolescents (Skinner et al., 1995). The mean age of adults was 38.6 years (S.D.= 8.5); 43% were men and 57% were women. Over half (53%) of adults had completed at least some post secondary education. The mean age of the adolescents was 15 years (S.D.= 3.6); 51% were male and 49% were female. Estimates of internal consistency of the FAM III were established by calculating a coefficient alpha which provided a summary index of the consistency based on the degree on inter-item correlation. Skinner, Steinhauer and Santa-Barbara (1983) reported the following estimates: Adults .93 General Scale, .95 Dyadic Relationship, .89 Self-Rating; Adolescents: .94 General Scale, .94 Dyadic Relationships, .86 Self-Rating. Evidence regarding the test-retest reliability of the FAM III is provided by Jacob (1995). Drawing from a sample of 138 families, after a 12-day

test-retest study, it was found that the median test-retest reliability for the FAM III subscales were .57, mothers, .56 fathers; and .66, adolescents.

The construct validity of the FAM III has been supported by numerous studies. Jacob (1995) administered the FAM III along with three other measures of family functioning to a sample of 138 mothers. These measures included the Family Adaptability and Cohesion Evaluation Scale (FACES) (Olson, Sprenkle & Russel, 1979), The Family Environment Scale (FES) (Moos, 1974; Moos & Moos, 1991), and the Family Assessment Device (FAD) (Epstein, Baldwin & Bishop, 1983). Since these instruments share a strong overlap of focus, correlations between FAM III and these other instruments were expected to be reasonably high. Jacob compared the seven subscales of FAM III (GS) with the two subscales of FACES and found correlations with Cohesion were high (ranging from -.39 to -.55 with a mean of -.48), but with Adaptability they were low (ranging from -.03 to .10 with a mean of .03). With the FES, correlations were high with Cohesion (ranging from -.33 to -.63 with a mean of -.45) and Conflict (ranging from .40 to .58 with a mean of .45) but were moderate with Expressiveness (ranging from -.25 to -.36 with a mean of -.31), Intellectual-Cultural Orientation (ranging from -.21 to -.32 with a mean of -.27), Moral-Religious Emphasis (ranging from -.06 to -.20 with a mean of -.14), and Control (ranging from -.07 to .04 with a mean of -.02). With the FAD, all correlations were high and significant (ranging from .67 to .73 with a mean of .69) (Epstein et al., 1983).

Bloomquist and Harris (1984) administered the FAM III General Scale and MMPI special family scales to 110 college undergraduates and found a strong relationship among MMPI special family scales and FAM III subscale scores (range of

.16 to .60 with a mean of .37). The MMPI "Family Problems" special subscale had particularly high correlations with FAM III subscales for Task Accomplishment (range of .46 to .54 with a mean of .50), Role Performance (range of .19 to .29 with a mean of .23), Communication (range of .25 to .33 with a mean of .28), Affective Expression (range of .40 to .47 with a mean of .44), Involvement (range of .24 to .31 with a mean of .27), and Values and Norms (range of .48 to .60 with a mean of .55).

A study by Reddon (1989) examined 16 families having preschool children with mental and, in some cases, physical handicaps. The FAM General, Dyadic and Self-Report Scales were administered along with the Parenting Stress Index (PSI: Abbindin, 1986) and the Family Inventory of Resources for Management (FIRM: McCubbin, Comeau, & Harkins, 1987). Correlations between PSI spousal relationship subscales and the FAM scales were high (range of .63 to .69 with a mean of .66). FIRM scales and the FAM scales were also high (range of -.66 to -.50 with a mean of -.58).

FAM III is an appropriate assessment instrument for this study because it has been used with many different types of samples. A number of researchers have identified mean differences for a variety of special population groups including developmentally disabled (Trute & Hauch, 1988), foster children (Kufeldt, Armstrong, & Dorosh, 1994), families including an alcoholic father (Jacob, 1991), mentally handicapped children (Reddon, 1989), and schizophrenic patients (Levene, 1991). The FAM III forms provide norms for a community based sample, and the means and standard deviations for these special populations provide another basis of comparison to aid in the interpretation of responses to the FAM III.

The FAM III has been frequently used to examine differences between different types of families. In general, the FAM III has shown sensitivity to group differences in research (Skinner et al., 1995). For example, Skinner, Steinhauer, and Santa-Barbara (1983) examined the diagnostic power of the FAM III using a sample that included “problem” and “non-problem” families. A multiple discriminant function analysis was conducted to determine whether the FAM III subscales would significantly differentiate between the two groups. The results indicated that FAM III was effective in differentiating the “problem” families from those that were not classified as “problem” families. A study by Forman (1988) divided participants into those involved in a distressed relationship and those involved in a non-distressed relationship as determined by scores obtained on the Dyadic Adjustment Scale (Spanier, 1976). Forman concluded the FAM III subscales significantly discriminated between distressed and non-distressed relationships.

Experiences in Close Relationship Inventory (ECRI)

The selected relationship qualities of avoidance and anxiety will be measured and operationalized by the subscales of the ECRI (Brennan, Clark & Shaver, 1998). The ECRI is a 36 item self-report romantic attachment measure that was derived from a factor analysis of most of the existing self-report measures of adult romantic attachment. Brennan, et al., conducted a thorough search of the self-report attachment literature from which they created a pool of 482 items designed to assess 60 named attachment-related constructs. Eliminating redundancy in the 482 items reduced the number to 323, from which all 60 subscales could be computed. Brennan, et al., administered the pool of attachment items to a large group of undergraduates (N=1086) at the University of Texas

at Austin. A factor analysis of the resulting data set produced two essentially independent factors of avoidance (discomfort with closeness and depending on others) and anxiety (fear of abandonment). Two 18-item scales were constructed from the 36 items (out of the total pool of 323) with the highest absolute-value correlations with one of the two higher-order factors of Avoidance and Anxiety.

Brennan et al. found the Avoidance and Anxiety scales were almost uncorrelated, $r = .11$. Both the Avoidance and Anxiety scales correlate very highly with their respective parent factors (the 60 attachment subscales); $r = .95$ in both cases. The ECRI Avoidance scale correlates highly with several other scales measuring avoidance and discomfort with closeness. For example, Carver's Personality and Adult Attachment scale (1994) $r = .90$, Rothbard, Roberts, Leonard and Eiden's Attachment Styles scale (1993) $r = .89$, Feeney, Noller, and Hanrahan's Attachment in Adults scale (1994) $r = .88$. The ECRI Anxiety scale correlates highly with scales measuring anxiety and preoccupation with attachment, jealousy, and fear of rejection. This is seen in Rothbard et al.'s Attachment Styles scale (1993) $r = .88$, Feeney et al.'s Attachment in Adults scale (1994) $r = .88$, and Carnelley and Pietromonaco's Depression and Relationship Functioning scale (1994) $r = .80$. In a separate comparison of the Anxiety and Avoidance scales with Bartholomew and Horowitz's (1991) self-report Attachment-Style Category measure Brennan et al. computed a multivariate analysis of variance (MANOVA) of the data and found the two higher-order factor scales (Anxiety and Avoidance) were to be highly significant with Bartholomew's touch and sexual preferences subscales.

In summary, for the purpose of this study the ECRI is a valuable measurement tool having the advantage of being derived from virtually every other extant self-report

adult romantic attachment measure. The two dimensions of anxiety and avoidance underlie virtually all self-report adult romantic attachment measures and appear crucial for capturing important individual differences in adult romantic attachment. The ECRI two 18-item scales have high internal consistency and being based on a large, comprehensive item pool, may be more precise than previous scales (Brennan et al.).

Religious Maturity Scale (RMS)

Dudley and Cruise (1990) developed the RMS in response to controversies in the psychology of religion field. With the RMS, Dudley and Cruise present what they hope to be a more defensible index of the personal religious search for meaning. According to Dudley and Cruise, measures of intrinsic and committed religiousness originate in efforts to operationalize Allport's (1950) classic description of religious maturity. However, according to Batson and Ventis (1982), such measures have failed to achieve their purpose because they reputedly record the orthodox fanaticism of a "true believer." Batson and his colleagues (1982) argued for a redress of the problem of defending committed religiousness noting that it includes a measure of a tolerant existential struggle for meaning. Batson operationalized his ideal by developing the Quest Scale, a 12 item self-report measure. High scores on the Quest Scale are designed to reveal a more cognitively flexible religious orientation in which faith is wedded to doubt.

Dudley and Cruise (1990) criticize Batson's conceptualization of committed religiousness. They suggest that doubt is incompatible with the sincere commitment that Allport identified as another aspect of mature religion. To their way of thinking, a person who scores high on Batson's Quest Scale

would be required to strongly agree with one set of items stressing commitment and the importance of faith while at the same time strongly agreeing with another

set of items stressing religious doubts and uncertainties. To us this seems rather illogical, not to mention uncomfortable. (Dudley & Cruise, p. 100)

Dudley and Cruise's solution was to define religious maturity within a psychological rather than a theological framework. The focus, in other words, is on the process of being religious rather than on the content of particular theological beliefs. High scores theoretically reflect a creative tension between sincere commitment and a tentative open-mindedness, rather than doubt. As described by this scale, the religiously mature individual believes, "I want to be ready to progress in my understanding when a new piece of the 'truth' becomes clear to me. In the meantime I will live by the light I have." (Dudley & Cruise, p. 101)

As a process rather than a content measure of religious commitment, this scale is appropriate for use with all types of religious subjects. Items were written after a careful analysis of Allport's (1950) claim that a mature religion should be "(1) well differentiated; (2) dynamic in character in spite of its derivative nature; (3) productive of a consistent morality; (4) comprehensive; (5) integral; and (6) fundamentally heuristic" (Allport as quoted by Dudley & Cruise, p. 98). Twenty-six statements of religious maturity were combined with 28 other Intrinsic, Extrinsic and Quest items to form a Personal Religious Inventory (PRI).

Dudley and Cruise administered the PRI to a sample of 491 mostly university students (1990). Each statement was followed by a 5-point Likert-style agreement scale. A factor analysis of the resulting data set uncovered three orthogonal dimensions: 1. Intrinsic Religion, 2. Extrinsic Religion, and 3. Religious Maturity. The 11 statements loading on the third factor were combined into the Religious Maturity Scale. Three negatively scored items articulated religious immaturity, with eight others expressing

maturity. Total scores were computed by summing across all 11 items, resulting in a possible range of 11 to 55.

The Religious Maturity Scale is a straightforward self-report measure. All items display an obvious face validity. Dudley and Cruise did not determine the reading level of their instrument, but comprehension of at least some items might demand a fairly high level of education (Watson, 1999). Most of the 491 subjects used by Dudley and Cruise were Catholic or Seventh-day Adventist university students. Seventy older adolescents and a smaller group of adults attending various religious functions were included as well. The Religious Maturity mean and standard deviation were not reported for this sample.

In terms of reliability Dudley and Cruise obtained a coefficient alpha of .55. They argued that this internal reliability was not higher because the construct is a difficult one to operationalize (Watson, 1999). It is not easy, they claimed, to combine “the intelligent and informed commitment to a belief system, with the open-minded tentativeness of the searcher of truth” (Dudley & Cruise, p. 103). The authors did note, however, that a more acceptable coefficient alpha of .68 was uncovered in another investigation examining a national sample of over 400 participants. In terms of validity Dudley and Cruise found that their instrument correlated positively with Batson’s Quest Scale (.37), but not with Allport’s Intrinsic (.10) or Extrinsic (.02) religious orientations.

For the purposes of this study the RMS is a valuable tool in assessing religious maturity because it offers a view of religious maturity from a psychological rather than theological framework. A measurement of religious maturity from the psychological perspective will help inform my questions concerning prayer and its potential in positively affecting interpersonal relationships.

Spiritual Maturity Index (SMI)

The SMI is a general measure of religious maturity that conceptualizes the construct as a continuous development process. Derived from evangelical Christian theology, the SMI is “marked by qualities that are similar to psychological maturity” (Ellison, 1984). Ellison conceives of the maturing person as showing autonomy (not basing faith beliefs on the consensus of others), keen perception of reality, and creativity in everyday life. He suggests that the spiritually mature person does not rely on support from others to maintain beliefs but develops those beliefs through critical self-reflections (Stevenson, 1999).

Ellison sees religious practices and beliefs as an integral part of life’s daily activities. Ellison believes spiritual maturity, unlike the closely related concept of spiritual well-being, implies meeting attitudinal and behavioral criteria not suggested in the concept of well-being. The spiritually mature person is self-principled and is able to enter into many full relationships with others. Hence, maturity reflects interdependence as well as a strong sense of self.

Spiritually mature persons are willing to make sacrifices for the welfare of others as well as cope with suffering and pain. Such individuals define their personal identity in relationship to closeness and communion with God. They tend to be conscientious regarding regular devotional time with God, seeing it as essential for spiritual growth. Self-principled and autonomous, these persons actively use their gifts and talents and are committed to cultivating and expressing the classic Christian virtues and disciplines (Stevenson, 1999).

The SMI consists of 30 self-report items scaled on a 6-point Likert-style format with reverse scoring on 12 items due to negative wording (see appendix K). Eighteen of the 30 items, if marked in the strongly agree direction, are said to be indicators of mature spirituality (see appendix K). No items are included as a check for social desirability or other response biases. The instructions indicate that there is no “right” response in an attempt to diffuse a social desirability tendency. Face validity of the scale is quite high because items are directly related to Ellison’s conceptualized quality of spiritual maturity (Stevenson, 1999).

Several studies report group means and standard deviations for the SMI. A sample of 319 adult Sunday School attendees from the same church report a mean of 138.1 (SD = 16.8), (Mack, Stone, Renfroe & Lloyd, 1987). A study of 117 students from three seminaries reported a mean of 140.73 (SD = 17.78), (Buhrow, Calkins, Haws & Rost, 1987). A study of 84 Catholic and 131 Protestant college students reported a mean score of 128.45 and 140.26 respectively with no SD reported (Bassett, Camplin, Humphrey, Dorr, Biggs, Distaffen, Doxtator, Flaherty, Hunsberger, Poage, & Thompson, 1991). Buhrow et al.’s (1987) study of 117 students reported an internal consistency coefficient of .87 (Cronbach’s alpha). Basset et al.’s (1991) 215 college students reported the same statistic with a value of .92.

In terms of the validity the SMI has yielded moderately significant correlations with Ellison’s Spiritual Well-Being Scale (SWBS). Ellison found this relationship ($r = .57$, $p = .001$) based on the belief that both were measuring different aspects of spiritual health. Bufford (1984) also found this relationship ($r = .62$).

For the purposes of this study the SMI is an appropriate measurement tool for spiritual maturity because it will help inform the question: Do people of differing spiritual maturity levels benefit differently from prayer.

Spiritual Well-Being Scale (SWBS)

The SWBS (Paloutzian & Ellison, 1982) was developed as a general measure of the subjective quality of life. It serves as a global psychological measure of one's perception of spiritual well-being. SWBS is presented as wholistic. The scale is intended to measure people's overall spiritual well-being as it is perceived by them in both a religious well-being sense and an existential well-being sense. Spiritual well-being is conceptualized differently from spiritual health or spiritual maturity. Spiritual well-being involves transcendence by focusing on well-being in relation to that which lies beyond oneself. The SWBS is intended to measure psychological dimensions, not theological ones (Boivin, Kirby, Underwood & Silva, 1999).

SWBS includes a religious and a social psychological dimension in its construction. The religious or "vertical" dimension focuses on how one perceives the well-being of his or her spiritual life as expressed in relation to God. The social psychological or "horizontal" dimension concerns how well the person is adjusted to self, community, and surroundings. This component involves the existential notions of life purpose, life satisfaction, and positive or negative life experiences. For these reasons the SWBS is an appropriate measurement instrument for the purposes of this study. The SWBS is a valid means of assessing spiritual maturity and well-being and has the added advantage of being brief.

SWBS is a 20-item self-assessment instrument constructed on two subscales, one that represents the vertical religious well-being dimension and one that represents the horizontal existential well-being dimension. Each subscale has 10 items. All of the religious well-being items contain the word “God.” The existential well-being items contain no specifically religious language, instead asking about such things as life purpose, satisfaction, and relations with people and situations around us. In order to control for response set bias, approximately half of the items are worded in a reverse direction so that disagreement with the item represents higher well-being. Each item is rated on a 6-point Likert Scale. The items are scored from 1 to 6, with a higher number representing greater well-being. These scores are summed in order to yield three scale scores: one score for total spiritual well-being, one score for existential well-being, and one score for religious well-being. The scale is nonsectarian and can be used in a variety of religious, health, and research contexts (Boivin et al., 1999).

The original sample consisted of 206 college students from the western half of the United States. Test-retest reliability coefficients for four different samples with 1, 4, 6, and 10 weeks between testings ranged from .88 to .99 for religious well-being, .73 to .98 for existential well-being, and .82 to .99 for spiritual well-being. The internal consistency reliability coefficients, based on data from over 900 subjects across seven studies, ranged from .82 to .94 for religious well-being, .78 to .86 for existential well-being, and .89 to .94 for spiritual well-being. These data indicate high internal consistency and reliability (Boivin et al., 1999).

SWBS face validity is evident by examination of the content of the items (Boivin et al., 1999). Validity is indicated by correlations between the SWBS scale and other

measures with which it ought to be associated on theoretical grounds (Boivin et al., 1999). Research by Ellison and Smith (1991) shows that religious well-being, existential well-being and spiritual well-being are associated with a variety of psychological, religious, health, and relational variables. Boivin et al. (1999) indicates this is one of the most widely used scales for research and clinical purposes. In their 1991 manual, the authors report they have received over 300 requests to use the scale.

Helpfulness of Prayer Scale (HPS)

The HPS was developed by Saudia, Kinney, Brown and Young-Ward (1995). Saudia et al. developed the HPS for use with subjects to rate the helpfulness of prayer in coping with the stress of cardiac surgery. Participants in the study were told that several methods have helped people relax while getting ready for cardiac surgery. Prayer as communication with a Higher Being is one method found to help people cope with the stress of surgery. Participants were asked whether they used prayer to help them prepare for cardiac surgery. If they answered yes they were asked to indicate how helpful it was.

Individuals were asked to indicate if they used prayer to deal with the stress of their upcoming surgery. Those who responded positively were asked to rate the helpfulness of prayer on a numbered rating scale, ranging from 0 to 15, with 0 indicating "not helpful" and 15 indicating "extremely helpful." A panel of three experts with graduate degrees in theology established content validity of the instrument. Test-retest reliability was established through administration of the instrument with a one-week interval to five subjects who had undergone heart surgery within the previous 6 months. One hundred percent agreement was found. Saudia et al.'s sample included 100 subjects. The majority of the subjects were male (72%), married (84%), and Protestant (87%). Two

subjects indicated that they did not use prayer themselves but that others prayed for them, and two did not use prayer at all. Of the 96 subjects who used prayer, 70 rated prayer as extremely helpful. One subject who used prayer did not believe prayer could be rated, and the rating given by the remaining 25 subjects was from 6 to 14 (mean prayer rating 13.29).

In this study a modified version of the HPS will be used. Specifically, the same 15-point Likert Scale will be used and participants will be asked to indicate the helpfulness of prayer based on the following statement:

Prayer as communication with a Higher Being is thought to be one method for changing the perception of Christian married couples' relationship. Please indicate whether prayer was helpful to you. Rate how helpful on the scale provided.

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Not at all helpful

Extremely helpful

Research Questions

The following research questions will be examined in this study:

A) Does intentional prayer improve the quality of Christian married couples' relationships?

1. Does participation in intentional prayer increase Christian married couples' perception of the quality of their interpersonal communication?
2. Does participation in intentional prayer increase Christian married couples' perception of the expression of affect in their relationship?
3. Does participation in intentional prayer increase Christian married couples' perception of the quality of affective involvement in their relationship?
4. Does participation in intentional prayer decrease Christian married couples' perception of the avoidance of emotional intimacy in their relationship?
5. Does participation in intentional prayer decrease Christian married couples' perception of the anxiety about emotional closeness in their relationship?

6. Does participation in intentional prayer increase Christian married couples' perception of their religious well-being?
7. Does participation in intentional prayer increase Christian married couples' perception of their existential well-being?

B) Are there specific characteristics that help to explain differences in the quality of the marital relationship among couples who used intentional prayer?

1. Do the characteristics of spiritual maturity, years married, number of children, and number of children in home explain the differences in the perception of interpersonal communication for Christian married couples?
2. Do the characteristics of spiritual maturity, years married, number of children, and number of children in home explain the differences in the perception of expression of affect in their relationship for Christian married couples?
3. Do the characteristics of spiritual maturity, years married, number of children, and number of children in home explain the differences in the perception of the quality of affective involvement in their relationship for Christian married couples?
4. Do the characteristics of spiritual maturity, years married, number of children, and number of children in home explain the differences in the perception of avoidance of emotional intimacy in their relationship for Christian married couples?
5. Do the characteristics of spiritual maturity, years married, number of children, and number of children in home explain the differences in the perception of anxiety about emotional closeness in their relationship for Christian married couples?
6. Do the characteristics of spiritual maturity, years married, number of children, and number of children in home explain the differences in the perception of religious well-being for Christian married couples?
7. Do the characteristics of spiritual maturity, years married, number of children, and number of children in home explain the differences in the perception of existential well-being for Christian married couples?

Data Analyses

For all research questions a two-factor analysis of covariance (ANCOVA) with multiple covariants will be used for the data analysis. Appropriate follow up analysis

will be done to specify observed differences. Given the exploratory nature of this study an alpha level of .05 will be used to test the significance of the observed comparisons.

CHAPTER 4 DATA ANALYSES AND RESULTS

The purpose of this research was to investigate whether intentional prayer improves married Christian couples' perception of the quality of their relationship. Intentional prayer being volitional communication with a Higher Being. The intent of this study was to determine if the married Christian couples' perception of their relationship changed or not through the use of intentional prayer. Results of the analyses of the research hypotheses are presented in this chapter. This chapter begins with a demographic description of the sample of married Christian couples.

Description of Sample

Christian married couples from fifteen churches in north central Florida participated in this study. In all, fifty-one couple's participated in the study (102 individuals), and were randomly assigned to either the experimental or control condition. There were twenty-five couples in the experimental group and twenty-six couples in the control group. Participants were from the following varying Christian denominational churches: Saint Andrew's Episcopal Church (N = 16), Hodge's Presbyterian Church (N = 2), Abundant Grace Community Church (N = 2), The Family Church (N = 26), Campus Church of Christ (N = 2), The Worldwide Church of God (N = 26), First Assembly of God (N = 2), Holy Faith Catholic Church (N = 2), Grace United Methodist Church (N = 4), The Vineyard Church (N = 4), Trinity United Methodist Church (N = 6), Hardeetown

Baptist Church (N = 2), First Church of the Nazarene Church (N = 4), Westminster Presbyterian Church (N = 2), The Gospel Lighthouse Church (N = 2).

For purposes of determining group equivalence, groups were compared on the three following relevant demographic variables: 1) number of years married; 2) number of children; 3) number of children at home, as indicated in Table 1.

The twenty-six couples in the control group had a mean of 16.27 years married with a standard deviation of 17.57 and a range of one to fifty-eight years married. The twenty-five couples in the experimental group had a mean of 24.66 years married with a standard deviation of 19.34 and a range of one to fifty-seven years married. A t test for independent means was performed on the means of the years married and indicated a significant difference between groups ($t = 3.56$, $df = 100$, $p < .05$). The observed difference between experimental and control group means is considered as an artifact of random assignment of participants to groups.

Table 1. Comparison of Years Married

Years Married	N	Mean	Std. Deviation	Minimum	Maximum	Range
Control	52	16.27	17.57	1	58	58
Experiment	50	24.66	19.34	1	57	57
Total	102	20.38	18.84	1	58	58

The twenty-six couples in the control group had a mean of 2.38 children with a standard deviation of 2.05 and a range of zero to six. The twenty-five couples in the experimental group had a mean of 1.88 children with a standard deviation of 1.36 and a range of zero to four. A t test for independent means was performed on the means of the number of children and indicated no significant difference between groups ($t = 0.12$, $df = 100$, $p > .05$).

Table 2. Comparisons of Numbers of Children per Couple

Children	N	Mean	Std. Deviation	Minimum	Maximum	Range
Control	52	2.38	2.05	0	6	6
Experiment	50	1.88	1.36	0	4	4
Total	102	2.14	1.75	0	6	6

The twenty-six couples in the control group had a mean of .94 children living at home with a standard deviation of 1.34 and a range of zero to five. The twenty-five couples in the experimental group had a mean of .52 children at home with a standard deviation of 1.15 and a range of zero to five. A *t* test for independent means was performed on the means of the number of children living at home and indicated no significant difference between groups ($t = 0.15$, $df = 100$, $p > .05$).

Table 3. Comparison of Number of Children in Home per Couple

Children	N	Mean	Std. Deviation	Minimum	Maximum	Range
Control	52	.94	1.34	0	5	5
Experiment	50	.52	0.86	0	3	3
Total	102	.74	1.15	0	5	5

Description of Data

All fifty-one couples completed a packet of five assessment instruments that measured relevant indices of couple satisfaction at the beginning of a thirty-day period and again at the end. The indices include interpersonal communication, affective expression and affective involvement sub-scales of the Dyadic Relationship Scale (Skinner, Steihhauser & Santa-Barbara, 1995); avoidance and anxiety sub-scales of the Experiences in Close Relationship Inventory (Brennam, Clark & Shaver, 1998); religious well-being and existential well-being sub-scales of the Spiritual Well-Being Scale (Ellison, 1983). Group means and standard deviation for all dependent variables can be found in appendix P.

In order to understand the relationships among the dependent and independent variables a series of Pearson product moment correlation coefficients were computed. Table 4 provides a matrix of these correlations. Fourteen of the 45 correlations were significant (12 at .01, 2 at .05 level). Of the significant correlations, the magnitude of the correlations were mid range (i.e. .22 to .45). With four exceptions, the direction for all correlations were in the expected direction. Among the exceptions were the relationships of helpfulness of prayer and affective expression, helpfulness of prayer and religious well-being, helpfulness of prayer and spiritual maturity, affective expression and religious maturity.

Table 4. Summary Table for the Results of the Pearson Correlation

	1	2	3	4	5	6	7	8	9
1									
2	-.07								
3	-.05	.27**							
4	-.05	.05	-.02						
5	-.02	.01	.02	.75**					
6	.07	.19	-.01	.30**	.19				
7	.02	-.12	.13	.31**	.31**	.17			
8	-.05	-.03	-.01	.80**	.68**	.33**	.38**		
9	.10	-.25*	-.12	.01	.02	.10	.13	.15	
10	.19	-.22*	.06	-.43**	-.25	-.33**	-.10	-.45**	-.11

Note: * = Correlation is significant at the .05 level (2-tailed). ** = Correlation is significant at the .01 level (2-tailed). 1 = interpersonal communication; 2 = affective expression; 3 = affective involvement; 4 = religious well-being; 5 = existential well-being; 6 = avoidance; 7 = anxiety; 8 = spiritual maturity index scale; 9 = religious maturity scale; 10 = helpfulness of prayer scale.

Research Questions

This study was designed to address the two following global research questions:

- Does intentional prayer improve the quality of Christian married couples' relationship?
- Are there specific characteristics that help to explain differences in the

quality of the marital relationship among couples? The two global research questions were further focused on each of the seven dependent variables.

A Two Factor Analysis of Covariance (ANCOVA) with multiple covariates was performed comparing the pretest and posttest scores of the males and females in the control group with the scores of their counterparts in the experimental group. Given the exploratory nature of the study an alpha level of .05 was selected to test the significance of the observed comparisons.

Question 1. Does participation in intentional prayer improve Christian married couples' perception of the quality of their interpersonal communication? Do the characteristics of spiritual maturity, years married, number of children, and number of children in home explain the differences in the perception of interpersonal communication for Christian married couples?

The Null Hypothesis stated that there would be no difference in the change in the quality of interpersonal communication between the couples in the experimental and the control groups. The Null Hypothesis was tested using a two factor ANCOVA with multiple covariates. The observed results, presented in Table 5, indicated that there were no differences for either main effect, treatment or gender; neither was there a significant interaction effect. Further, no significant relationships were observed between the covariates and the dependent variable. Thus, the Null Hypothesis was retained.

Table 5. Summary Table for the Results of ANCOVA for Interpersonal Communication

Source	df	Mean Square	F	Significance
PRERMS	1	.90	.71	.40
PRESMS	1	1.21	.96	.33
YRSMAR	1	2.56	2.03	.16
CHILDREN	1	1.84	1.45	.23
CHIHOME	1	2.19	1.73	.19
PRECOM	1	22.94	18.15	.00
GENDER	1	1.22	.96	.33
TREAT	1	.46	.36	.55
TREAT*GENDER	1	.04	.03	.87

Note: PRERMS = Religious Maturity Scale; PRESMS = Spiritual Maturity Index scale; YRSMAR = years married; CHILDREN = number of children; CHIHOME = children still at home; PRECOM = interpersonal communication score; TREAT = experimental treatment; GENDER = male or female score.

Question 2. Does participation in intentional prayer improve Christian married couples' perception of the expression of affect in their relationship? Do the characteristics of spiritual maturity, years married, number of children, and number of children in home explain the differences in the perception of expression of affect in their relationship for Christian married couples?

The Null Hypothesis stated there would be no difference in the change in the quality of affective expression between the couples in the experimental and the control groups. The Null Hypothesis was tested using a two factor ANCOVA with multiple covariates. The observed results, presented in Table 6, indicated that there were no differences for either main effect, treatment and gender; neither was there a significant interaction effect. Further, no significant relationships were observed between the covariates and the dependent variable. Thus, the Null Hypothesis was retained.

Table 6. Summary Table for the Results of ANCOVA for Affective Expression

Source	df	Mean Square	F	Significance
PRERMS	1	.31	.16	.69
PRESMS	1	.17	.09	.77
YRSMAR	1	1.02	.53	.47
CHILDREN	1	.26	.14	.71
CHIHOME	1	6.03	3.14	.08
PREAFFEC	1	60.26	31.35	.00
TREAT	1	2.60	1.36	.25
GENDER	1	.00	.00	.99
TREAT*GENDER	1	.02	.01	.92

Note: PRERMS = Religious Maturity Scale; PRESMS = Spiritual Maturity Index scale; YRSMAR = years married; CHILDREN = number of children; CHIHOME = children still at home; PREAFFEC = affective expression score; TREAT = experimental treatment; GENDER = male or female score.

Question 3. Does participation in intentional prayer improve Christian married couples' perception of the quality of affective involvement in their relationship? Do the characteristics of spiritual maturity, years married, number of children, and number of children in home explain the differences in the perception of the quality of affective involvement in their relationship for Christian married couples?

The Null Hypothesis stated that there would be no difference in the change in the quality of affective involvement between the couples in the experimental and the control groups. The Null Hypothesis was tested using a two factor ANCOVA with multiple covariates. The observed results, presented in Table 7, indicated that there were no differences for either main effect, treatment or gender; neither was there a significant interaction effect. Further, no significant relationships were observed between the covariates and the dependent variable. Thus, the Null Hypothesis was retained.

Table 7. Summary Table for the Results of the ANCOVA for Affective Involvement

Source	df	Mean Square	F	Significance
PRERMS	1	.04	.04	.86
PRESMS	1	2.84	2.65	.11
YRSMAR	1	2.76	2.57	.11
CHILDREN	1	.01	.01	.94
CHIHOME	1	2.65	2.47	.12
PREINVOL	1	24.11	22.46	.00
TREAT	1	.59	.55	.46
GENDER	1	.08	.07	.79
TREAT*GENDER	1	.60	.56	.46

Note: PRERMS = Religious Maturity Scale; PRESMS = Spiritual Maturity Index scale; YRSMAR = years married; CHILDREN = number of children; CHIHOME = children still at home; PREINVOL = affective involvement score; TREAT = experimental treatment; GENDER = male or female score.

Question 4. Does participation in intentional prayer improve Christian married couples' perception of the avoidance of emotional intimacy in their relationship? Do the characteristics of spiritual maturity, years married, number of children, and number of children in home explain the differences in the perception of avoidance of emotional intimacy in their relationship for Christian married couples?

The Null Hypothesis stated that there would be no difference in the change in the quality of avoidance between the couples in the experimental and the control groups. The Null Hypothesis was tested using a two factor ANCOVA with multiple covariates. The observed results, presented in Table 8, were that there were no differences for either main effect, treatment or gender; neither was there a significant interaction effect.

Despite the absence of main or interaction effects a significant relationship was observed between avoidance of emotional intimacy and two of the covariates. The first exception was a significant difference observed between spiritual maturity and the avoidance of emotional intimacy. The significance indicated there was a positive linear relationship between spiritual maturity and the avoidance of emotional intimacy, that is,

as participants spiritual maturity increased so did their avoidance of emotional intimacy. This relationship can be understood in light of one of the constructs used to define spiritual maturity. A spiritually mature person is understood to be high in showing autonomy (i.e., not basing faith beliefs on the consensus of others). Thus, a spiritually mature person does not rely on support from others to maintain beliefs but develops those beliefs through critical self-reflection (Stevenson, 1999). Further, the spiritually mature person is self-principled as well as having a strong sense of self (Ellison, 1984). The journey to spiritual maturity is experienced internally as an individual and not in connection with another. This emphasis on spiritual autonomy appears to mitigate against emotional intimacy.

There was also a significant difference observed between the number of children at home and avoidance of emotional intimacy. The significance indicated there was a positive linear relationship between the number of children at home and avoidance of emotional intimacy, that is, as the number of children in the home increases so does the avoidance of emotional intimacy. This may be due to the increased work load of each spouse as they seek to provide emotionally and materially for their expanding family unit. Thus, the Null Hypothesis was rejected.

Table 8. Summary Table for the Results of ANCOVA for Avoidance

Source	df	Mean Square	F	Significance
PRERMS	1	91.60	3.12	.08
PRESMS	1	222.75	7.59	.01
YRSMAR	1	17.63	.60	.44
CHILDREN	1	14.61	.50	.48
CHIHOME	1	111.78	3.81	.05
PREAVOID	1	750.35	25.55	.00
TREAT	1	6.96	.24	.63
GENDER	1	12.30	.42	.52
TREAT*GENDER	1	44.04	1.50	.22

Note: PRERMS = Religious Maturity Scale; PRESMS = Spiritual Maturity Index scale; YRSMAR = years married; CHILDREN = number of children; CHIHOME = children still at home; PREAVOID = avoidance score; TREAT = experimental treatment; GENDER = male or female score.

Question 5. Does participation in intentional prayer improve Christian married couples' perception of the anxiety about emotional closeness in their relationship? Do the characteristics of spiritual maturity, years married, number of children, and number of children in home explain the differences in the perception of anxiety about emotional closeness in their relationship for Christian married couples?

The Null Hypothesis stated that there would be no difference in the change in the quality of anxiety between the couples in the experimental and the control groups. The Null Hypothesis was tested using a two factor ANCOVA with multiple covariates. The observed results, presented in Table 9, indicated that there were no differences for either main effect, treatment or gender; neither was there a significant interaction effect. Further, no significant relationships were observed between the covariates and the dependent variable. Thus, the Null Hypothesis was retained.

Table 9. Summary Table for the Results of ANCOVA for Anxiety

Source	df	Mean Square	F	Significance
PRERMS	1	5.64	.07	.79
PRESMS	1	18.58	.24	.62
YRSMAR	1	27.65	.36	.55
CHILDREN	1	41.41	.54	.46
CHIHOME	1	1.26	.02	.90
PREANX	1	11071.47	144.46	.00
TREAT	1	7.49	.10	.76
GENDER	1	43.89	.57	.45
TREAT*GENDER	1	.70	.01	.93

Note: PRERMS = Religious Maturity Scale; PRESMS = Spiritual Maturity Index scale; YRSMAR = years married; CHILDREN = number of children; CHIHOME = children still at home; PREANX = anxiety score; TREAT = experimental treatment; GENDER = male or female score.

Question 6. Does participation in intentional prayer improve Christian married couples' perception of their religious well-being? Do the characteristics of spiritual maturity, years married, number of children, and number of children in home explain the differences in the perception of religious well-being for Christian married couples?

The Null Hypothesis stated that there would be no difference in the change in the quality of religious well-being between the couples in the experimental and the control groups. The Null Hypothesis was tested using a two factor ANCOVA with multiple covariates. The observed results, presented in Table 10, indicated that there were no differences for either main effect, treatment or gender; neither was there a significant interaction effect. Further, no significant relationships were observed between the covariates and the dependent variable. Thus, the Null Hypothesis was retained.

Table 10. Summary Table for the Results of ANCOVA for Religious Well-Being

Source	df	Mean Square	F	Significance
PRERMS	1	.56	.03	.87
PRESMS	1	36.58	2.18	.14
YRSMAR	1	2.69	.16	.69
CHILDREN	1	22.92	1.36	.25
CHIHOME	1	6.61	.39	.53
PRERWB	1	822.60	48.92	.00
TREAT	1	50.58	3.01	.09
GENDER	1	7.57	.45	.50
TREAT*GENDER	1	28.17	1.68	.20

Note: PRERMS = Religious Maturity Scale; PRESMS = Spiritual Maturity Index scale; YRSMAR = years married; CHILDREN = number of children; CHIHOME = children still at home; PRERWB = religious well-being score; TREAT = experimental treatment; GENDER = male or female score.

Question 7. Does participation in intentional prayer improve Christian married couples' perception of their existential well-being? Do the characteristics of spiritual maturity, years married, number of children, and number of children in home explain the differences in the perception of existential well-being for Christian married couples?

The Null Hypothesis stated that there would be no difference in the change in the quality of existential well-being between the couples in the experimental and the control groups. The Null Hypothesis was tested using a two factor ANCOVA with multiple covariates. The observed results, presented in Table 11, indicated that there were no differences for either main effect, treatment or gender; neither was there a significant interaction effect.

Despite the absence of main or interaction effects a significant relationship was observed between existential well-being and one of the covariates. The exception was an observed difference between the scores of spiritual maturity and existential well-being. The significance indicated there was a positive linear relationship between spiritual maturity and existential well-being, that is, as participants spiritual maturity increases so

does their existential well-being. This finding follows Ellison's (1984) supposition that as people mature spiritually they are willing to make sacrifices for the welfare of others as well as cope with suffering and pain (Stevenson, 1999). In turn, this openness positively impacts their existential sense of well-being in relation to their adjustments to self, community, surroundings and their life experiences (Paloutzian & Ellison, 1982). Thus, the Null Hypothesis was rejected.

Table 11. Summary Table for the Results of ANCOVA for Existential Well-Being

Source	df	Mean Square	F	Significance
PRERMS	1	4.56	.17	.68
PRESMS	1	179.79	6.77	.01
YRSMAR	1	62.76	2.36	.13
CHILDREN	1	26.55	1.00	.32
CHIHOME	1	32.76	1.23	.27
PREEWB	1	767.04	28.90	.00
TREAT	1	.41	.02	.90
GENDER	1	2.34	.09	.77
TREAT*GENDER	1	50.48	1.90	.17

Note: PRERMS = Religious Maturity Scale; PRESMS = Spiritual Maturity Index scale; YRSMAR = years married; CHILDREN = number of children; CHIHOME = children still at home; PREEWB = existential well-being score; TREAT = experimental treatment; GENDER = male or female score.

Participants responses to the Helpfulness of Prayer scale were tested using a two factor ANCOVA with multiple covariates. The observed results, presented in Table 12, indicated that there were no differences for either main effect, treatment or gender; neither was there a significant interaction effect. Further, no significant relationships were observed between the covariates and the dependent variable.

Table 12. Summary Table for the Results of ANCOVA for Helpfulness of Prayer Scale

Source	df	Mean Square	F	Significance
PREPS	1	369.48	116.17	.00
PRERMS	1	2.22	.70	.41
PRESMS	1	6.50	2.04	.16
YRSMAR	1	.20	.06	.80
CHILDREN	1	.01	.00	.96
CHIHOME	1	.82	.26	.61
TREAT	1	.87	.27	.60
GENDER	1	.89	.28	.60
TREAT*GENDER	1	.12	.04	.85

Note: PREPS = Helpfulness of Prayer Scale; PRERMS = Religious Maturity Scale; PRESMS = Spiritual Maturity Index scale; YRSMAR = years married; CHILDREN = number of children; CHIHOME = children still at home; TREAT = experimental treatment; GENDER = male or female score.

Summary

The question of whether intentional prayer affected Christian married couple's perception of their relationship was examined by analyzing their responses to seven indices of couple satisfaction. Results of the analysis supported the Null Hypothesis in all cases but two. In those two cases, avoidance of emotional intimacy and spiritual maturity, avoidance of emotional intimacy and the number of children at home, and existential well-being and spiritual maturity were significantly related to couple's satisfaction.

CHAPTER 5 DISCUSSION

The purpose of this research was to investigate whether intentional prayer improves Christian married couples' perception of the quality of their relationship. The intent of this study was to determine if the Christian married couples' perception of their relationship changed or not through the use of intentional prayer. A summary of the study, conclusions and implications for future research are presented in this chapter.

Summary of the Study

For the purpose of this study change in the perceived quality of Christian married couples' relationship was the variable of interest. In assessing the change of perception of the participants the dependent variables included interpersonal communication, affective expression, affective involvement, avoidance of emotional intimacy, anxiety in emotional closeness, religious well-being and existential well-being. The designated independent variables were spiritual maturity and religious maturity. Each of the variables were assessed by using sub scales of published measurement instruments.

Christian married couples from fifteen churches in north central Florida participated in this study. In all, fifty-one couple's participated in the study (102 individuals), and were randomly assigned to either the experimental or control condition. There were twenty-five couples in the experimental group and twenty-six couples in the control group. Participants were from the following varying Christian denominational churches: Saint Andrew's Episcopal Church, Hodge's Presbyterian Church, Abundant

Grace Community Church, The Family Church, Campus Church of Christ, The Worldwide Church of God, First Assembly of God, Holy Faith Catholic Church, Grace United Methodist Church, The Vineyard Church, Trinity United Methodist Church, Hardeetown Baptist Church, First Church of the Nazarene Church, Westminster Presbyterian Church, The Gospel Lighthouse Church.

For purposes of determining group equivalence, groups were compared on the three following relevant demographic variables: 1) number of years married; 2) number of children; 3) number of children at home. There were no differences between the groups for number of children and the number of children at home. In contrast, the observed difference between the experimental and control group means for number of years married was significant. This finding was considered as an artifact of random assignment of participants to groups.

The experimental design for this study was a pretest-posttest control group design with repeated measures and random assignment. This design allowed for the comparison of the treatment group with the control group after the completion of the prescribed intervention. Couples in the experimental group were asked to pray together out loud on a daily basis asking God to enrich and enhance their relationship and their spouse.

Experimental couples satisfied the experiment requirement through the use of a free form prayer (appendix E) or by using a scripted prayer (appendix F). All participants completed a packet of five assessment instruments that measured relevant indices of couple satisfaction at the beginning of a thirty-day period and again at the end. The indices included interpersonal communication, affective expression and affective involvement sub-scales of the Dyadic Relationship Scale (Skinner, Steihauer & Santa-

Barbara, 1995); avoidance and anxiety sub-scales of the Experiences in Close Relationship Inventory (Brennam, Clark & Shaver, 1998); religious well-being and existential well-being sub-scales of the Spiritual Well-Being Scale (Ellison, 1983). Upon completion of the posttest the data was processed in a two factor analysis of covariance (ANCOVA) with multiple covariates.

Results

The analysis of the data yielded mixed results. Specifically for the dependent variables of interpersonal communication (i.e., question one), affective expression (i.e., question two), affective involvement (i.e., question three), anxiety about emotional closeness (i.e., question five) and religious well-being (i.e., question six) there were no significant difference for main effect, neither were there significant interaction effects.

In contrast, significant findings were observed between the covariates and the dependent variables of avoidance of emotional intimacy (i.e., question four) and existential well-being (i.e., question seven). The relationship observed between avoidance of emotional intimacy and spiritual maturity is particularly noteworthy. The data indicated there was a positive linear relationship between avoidance of emotional intimacy and spiritual maturity, that is, as participants spiritual maturity increased so did their avoidance of emotional intimacy. This relationship can be understood in light of one of the constructs used to define spiritual maturity. The journey to spiritual maturity is experienced internally as an individual and not in connection with another. This emphasis on spiritual autonomy appears to mitigate against emotional intimacy. A spiritually mature person is understood to be high in showing autonomy (i.e., not basing faith beliefs on the consensus of others). Thus, a spiritually mature person does not rely on support

from others to maintain beliefs but develops those beliefs through critical self-reflection (Stevenson, 1999). Further, the spiritually mature person is self-principled as well as having a strong sense of self (Ellison, 1984). The foundational construct for avoidance of emotional intimacy and closeness is that individual differences in adult attachment behavior are reflections of the expectations and beliefs people have formed about themselves and their close relationships on the basis of their early in life attachment histories (Brennan et al., 1998). As people build new relationships, they rely partly on previous expectations about how others are likely to behave and feel toward them, and they use these models to interpret the goals or intentions of their partners. A person experiencing avoidance of emotional intimacy early in life brings to the marriage the tendency to be more autonomous and not strongly connect emotionally, thus predisposing them to the opportunity of a higher level of spiritual maturity. A person who is considered spiritually mature by construct definition is more autonomous and less likely to rely on support from others (Stevenson, 1999). It may be that those people who do not emotionally connect strongly with their partners tend to be open to a higher level of spiritual maturity. Alternately, those who tend to avoidance of emotional intimacy and closeness with their partner may be drawn to the spiritual dimensions of their lives out of loneliness. That is, what they could not find in the human relationship they seek to find in a spiritual relationship with the Divine.

There was also a positive linear relationship between the number of children at home and avoidance of emotional intimacy, that is, as the number of children in the home increases so does the avoidance of emotional intimacy. This may be due to the increased work load of each spouse as they seek to provide emotionally and materially for their

expanding family unit. For example, as the number of children increases and the attendant work load increases the need for recovery in alone time increases. Increased alone time provides the opportunity for critical self-reflection and a greater sense of autonomy which are aspects of spiritual maturity. As the need for alone time increases it would mitigate for increased avoidance of emotional intimacy.

For existential well-being, a significant relationship was observed between existential well-being and spiritual maturity. The data indicated there was a positive linear relationship between spiritual maturity and existential well-being, that is, as participants spiritual maturity increases so does their existential well-being. This finding follows Ellison's (1984) supposition that as people mature spiritually they are willing to make sacrifices for the welfare of others as well as cope with suffering and pain (Stevenson, 1999). In turn, this openness positively impacts their existential sense of well-being in relation to their adjustments to self, community, surroundings and their life experiences (Paloutzian & Ellison, 1982). The high correlation between existential well-being and spiritual maturity ($r = .68$, $p < .01$) suggest the Spiritual Well-Being Scale (Ellison, 1983) and the Spiritual Maturity Index (Ellison, 1983) are measuring approximately the same factor.

Given the strong relationship between spiritual maturity and existential well-being, and avoidance of emotional intimacy with number of children in the home, and avoidance of emotional intimacy with spiritual maturity one may observe that spiritual maturity enhances existential well-being and mitigates against emotional intimacy. At the same time avoidance of emotional intimacy tends to increase as the number of children in the home increases.

Conclusions

I began this study by describing a disparity between people's views about the centrality of spirituality in their lives, as expressed in prayer, and the attention it has received from behavioral researchers (Anderson & Worthen, 1997; Poloma & Pendleton, 1991; Richards & Bergin, 1997; Ross, 1994; Stander, Piercy, Mackinnon & Helmeke, 1994). Further, a number of researchers (e.g., Greeley, 1991; Sheler, 1994; Poloma & Pendleton, 1991; Walsh, 1999; Woodward, 1997) have reported that people acknowledge an appreciation of the spiritual dimension of prayer in their lives. In contrast, behavioral researchers have not elected to focus on such matters (Gorsuch, 1984). Notwithstanding the historic tradition, there is now emerging a body of research that is investigating spirituality and prayer and how it relates to physical (Dossey, 1993; Matthews, 1998; Schlitz & Lewis, 2001; Sicher, Targ, Moore & Smith, 1998; Targ, 1999; Volz, 1999) and psychological well-being (Chamberlain & Hall, 2000; Poloma & Pendleton, 1991; Stander, Piercy, Mackinnon & Helmeke, 1994; Walsh, 1999; Warfield & Goldstein, 1996).

The purpose of this study was to investigate if prayer is an intervention that counselors may use in serving their clients. Specifically, this study examined whether prayer improves Christian married couples' perception of the quality of their relationship. My expectations for the results of the study, based upon my own experience and the reported findings in the fields of medicine and psychology, were that prayer would have a positive effect upon Christian married couples' perceptions of their relationship. The results of this study, however, did not lend support for this position.

The discrepancy between expectation and results of this study may be understood in the inherent difficulty of measuring human perceptions at any given point in time. Human perceptions are challenging to capture because people tend to change in their thinking and feeling. Human cognitive and emotional perceptions are hard to accurately articulate. Further, measurement instruments are often limited in their accuracy of measurement, although that did not appear to be the case in this study. Observed reliability estimates for the scales ranged from .04 to .94 with a median of .81. Closer examination of these estimates (see the Table in appendix Q) indicate that except for two scales the observed estimates were comparable to those reported in the literature. Further, intentional prayer, as an aspect of a person's spirituality, is an elusive activity to accurately observe, measure and report. Prayer is an intensely personal and private conversation with the Higher Being that is experienced internally and individually. The instruments that I elected to use did not tap the nature and quality of prayer. The results of this study suggest that intentional prayer may not be a helpful means of evoking change in Christian married couples' perceptions of their relationship.

Implications for Future Research

For reasons not altogether understandable, participants exhibited an unexpected unwillingness to participate in this study. This unwillingness to participate necessitated the study to extend much longer than anticipated in order to find those willing to participate. I observed that prayer is a very personal and private activity that few Christian couples are willing to share with others. Future researchers may need to account for this closedness to sharing about prayer in a couple's relationship.

The current array of objective instruments may not be suitable for the purpose of measuring the effects of prayer. It may well be that more refined instruments will be developed in the future. It seems clear, however, other instruments are needed to effectively measure the efficacy of prayer.

In terms of future research it would possibly be helpful to convey to the participants more specific ideas of the advantages of intentional prayer. Participants' motivation to be involved in prayer studies could be increased by conveying the known advantages of prayer and what they might specifically expect from intentional prayer over a period of time.

Participants could be requested to make notes on conversations that follow intentional prayer as an observation of the potential effects of the prayer. This would provide the researcher insight on how couples process prayer and the conversation that follows.

It would also be helpful to focus sample selection more narrowly, such as newly married couples or couples experiencing marital challenges. Such a practice would enhance the likelihood of obtaining a truer measure of the efficacy of prayer as a device for ameliorating a couple's relationship.

Limitations of this study

The participants in this study cannot be considered truly random for the following reasons: (a) all participants were self-selected to participate; (b) participants are primarily from a small urban population in the southeastern United States; (c) participants are only heterosexual Christian married couples; (d) paper and pencil measurement instruments are used rather than direct observance of behavior. The method of sampling

limits the generalizations of the study to the groups used. In addition, according to Webb, Campbell, Schwartz, and Sechrest (1966) the method of self-reporting information is retrospective in nature and subject to bias.

The sample studied were volunteer participants from fifteen Christian churches in the north central Florida area. The small amount of variation in the pretest-posttest results may reflect the homogeneous nature of the sample. Future studies with a more varied sample would provide greater heterogeneity.

This study involved fifty-one couples or one hundred and two individuals. The data results may have shown greater variation with a larger number in the sample. Futures studies with a larger sample may indicate a greater variation in the data.

It was estimated that the experiment could be completed in two to three months but this was not the case. The length of the study was elongated to eight months due to the unexpected reluctance of Christian married couples to participate. I believe this reluctance reflects the fear of disclosure of a Christian's prayer habits, yet with time and perseverance fifty-one couples did agree to participate. Other possible elongating factors were that the experiment commenced shortly after the national disaster of September 11, 2001 which shocked the nation and could have had an effect upon the participant's responses, additionally, the experiment extended over the winter holiday season which may have acted as a distraction. Future research during a more placid and shorter period of time may yield different results.

APPENDIX A INVITATION

Dear Christian Friend,

Prayer has been a cornerstone of Christian tradition and belief for centuries. Yet, do Christians really believe that prayer helps? For example, do married couples use prayer to enhance their relationship? And if they do, what difference does the prayer make with their relationship?

I am a graduate student in the Marriage and Family Program in the Department of Counselor Education at the University of Florida and I am interested in finding answers to these questions. As a part of my doctoral program I am conducting a study of how prayer affects the relationship of Christian married couples. I want to invite you to join with me in my pursuit. The specific purpose of my study is to observe the effectiveness of prayer upon Christian married couples' perceptions of their relationship. The results of this study may help counselors, ministers and those who train them to understand how prayer may be used as an aid to enrich married Christian relationships. Although these results may benefit you or your mate at the present, they may also be of future benefit to counselors and ministers in counseling Christian couples.

If you accept this invitation you will be requested to complete a packet of relationship measurements at the beginning and the end of a 30 day and 60 day period. Half of the group will be asked to pray out loud for their mate using a model prayer form or a free-form outline once a day for at least three minutes. Identity will be kept confidential to the extent provided by the law.

If you and your mate would like to know more about this research project and how to participate in it, please come to room _____ after the service. Thank you for considering serving and helping in this research.

Ken Smylie, UF Graduate Student

APPENDIX B DESCRIPTION OF THE STUDY

Does prayer have an effect on your perception of your marriage? That's what this study is all about. I want to see if the deliberate use of prayer to bless one's mate out loud in prayer ~~each~~ day has an effect in how couples see their relationship. By agreeing to participate in this investigation you and your spouse will provide important information that will allow me to answer this question. The study will be completed in three parts.

Part one is getting organized, which is what we are doing now. We will be dividing the group into treatment group and control group and explaining what each group is to do for the next 30 days. The treatment group will be instructed in how and what to pray for their mate ~~each~~ day. They will be asked to write down on a form when they prayed each day. Those in the control group will be asked to simply live as they always do. Both groups will then be asked to complete some brief but interesting questionnaires. In these questionnaires you will be asked to describe how you see your relationship with your mate, how you see your religious and spiritual life ~~and~~ and your views about the helpfulness of prayer. There are no right or wrong answers. The best response is the most honest response.

Part two is the 30 days following our organization meeting and called phase one. ~~Phase~~ one is the time period that the treatment group will be engaging the experimental condition. During this time the control group will live as they normally do. After the 30 days both groups will come together and fill out the questionnaires once again.

Part three is the next 30 days and is known as phase two. Those in the treatment group now switch and become the control group. This means the experimental group will discontinue

the experimental prayer exercise. The control group now becomes the treatment group and begins the prayer exercise. Once again, after the second 30 days we gather and fill out the questionnaires. The responses to the questionnaires will then be examined and the results made available.

APPENDIX C INFORMED CONSENT FORM

Dear Christian Friend,

I am a graduate student in the Department of Counselor Education at the University of Florida, conducting research for my dissertation under the supervision of Dr. Harry Daniels. The purpose of this study is to determine whether intentional prayer influences Christian married couples' perception about the quality of their relationships. The results of this study may help family therapists to understand how prayer may be used as an aid in helping Christian marriages. Although these results may or may not benefit you or your mate at the present, they may benefit future Christian couples while in counseling.

Couples will be assigned to either an experimental or control group. Couples assigned to the experimental group will be asked to pray out loud together on a daily basis to ask God to enrich and/or enhance their relationship. Couples may satisfy the experimental requirement through the use of free form prayer or by using a scripted prayer that will be provided. Both the example prayer and the outline for the free form prayer will ask God to bless, affirm, love and value the mate of the one who prays.

Couples in the control group will be asked to live their lives as they normally do for the next 30 days. You will be requested to complete a packet of relationship measures at the beginning and the end of a 30 day and 60 day period. The expected time to complete the measurement packet is a little over an hour. All of the items on each of the measures are designed to seek your perspective. There are no right or wrong answers to any item.

Nonetheless, you do not have to answer any question you do not wish to answer. Your identity will be kept confidential to the extent provided by the law. I will replace names with code numbers, and identifying information will be kept locked until the study is complete. At the end of the study, any identifying information will be destroyed.

You and you mate have the right to withdraw your consent at any time without consequence. There are no known risks or immediate benefits to the participants. No compensation is offered for participation. Group results will be available when the study is complete upon request.

If you have any questions about this research project, please contact me at 374-6585 or my supervisor, Dr. Harry Daniels at 392-0731. My campus address is Department of Counselor Education, 1215 Norman Hall, Gainesville, FL, 32611-7046.

Questions or concerns about research participant's rights may be directed to the UFIRB office, University of Florida, Box 112250, Gainesville, FL 32611, (352) 392-0433.

Thank you.

Kenneth L. Smylie, Ed.S.

I have read the procedure described above. I agree to participate in the procedure. I ~~have~~ received a copy of this description.

(Husband) _____ (Date)
(Wife) _____ (Date)
(Witness) _____ (Date)

APPENDIX D
INSTITUTIONAL REVIEW BOARD APPROVAL FORM



UNIVERSITY OF FLORIDA

Institutional Review Board

98A Psychology Bldg.

PO Box 112250

Gainesville, FL 32611-2250

Phone: (352) 392-0433

Fax: (352) 392-9234

E-mail: irb2@ufl.edu

<http://web.ortge.ufl.edu/irb/irb02>

DATE: 20-Dec-2000

TO: Mr. Kenneth L. Smylie
2121 NW 57 Terr
Gainesville, FL 32605

FROM: C. Michael Levy, Chair *cm Levy*
University of Florida
Institutional Review Board

SUBJECT: **Approval of Protocol # 2000 - 1031**

TITLE: The use of intentional prayer to influence Christian married couples' perception of their relationship

FUNDING: Unfunded

I am pleased to advise you that the University of Florida Institutional Review Board has recommended approval of this protocol. Based on its review, the UFIRB determined that this research presents no more than minimal risk to participants. Given your protocol, it is essential that you obtain signed documentation of informed consent from each participant. Enclosed is the dated, IRB-approved informed consent to be used when recruiting participants for the research.

If you wish to make any changes to this protocol, including the need to increase the number of participants authorized, you must disclose your plans before you implement them so that the Board can assess their impact on your protocol. In addition, you must report to the Board any unexpected complications that affect your participants.

If you have not completed this protocol by 20-Dec-2001, please telephone our office (392-0433), and we will discuss the renewal process with you.

It is important that you keep your Department Chair informed about the status of this research protocol.

CML:dljs

cc: Dr. Harry Daniels

APPENDIX E FREE FORM PRAYER OUTLINE

Free form prayer is a prayer of your own creation. You are asked to create a prayer that you daily pray to God out loud in your mate's presence and contains the following elements:

- ◆ Ask God to enrich and enhance you and your mate's relationship.
- ◆ Ask God to bless, affirm, love and value your mate.
- ◆ Ask God to help you bless, affirm, love and value your mate as he does.

APPENDIX F MODEL PRAYER FORM

Dear Jesus,

I ask you to bless my wife/husband at this time. I am asking you to minister to her/his spirit at this very moment.

Where there is pain, give her/him your peace and grace.

Where there is self-doubt release a renewed confidence in your ability to work through her/him.

Where there is tiredness, or exhaustion, I ask you to give her/him understanding, patience, and strength as they learn submission to your leading.

Where there is spiritual stagnation, I ask you to renew her/him by revealing your nearness, and by drawing them into greater intimacy with you.

Where there is fear, reveal your love, and release her/him to your courage.

Where there is sin blocking her/him, reveal it, and break its hold over my mate's life.

Please bless my wife/husband. Give her/him more of your love. Release me to love her/him as freely as you do.

I ask you to do these things in Jesus' name. Amen.

APPENDIX G
TRACKING FORM

Daily Prayer Tracking Form

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25
26	27	28	29	30

Y=yes we prayed, N=no we did not pray, M=morning, A=afternoon, E=evening, X=we used the example prayer, O=we used the outline prayer. You may comment here and on back, thank you.

Couple Tracking Number: _____

APPENDIX H
FAMILY ASSESSMENT MEASURE-III

Dyadic Relationship Scale: Strongly Agree/Agree/Disagree/Strongly Disagree

- 1 This person accepts what I expect of him/her in the family.
- 2 I know what this person means when he/she says something.
- 3 I can tell when this person is upset.
- 4 This person and I aren't close to each other.
- 5 This person is reasonable when I make a mistake.
- 6 This person and I have the same views about right and wrong.
- 7 This person can never accept my answer to a problem.
- 8 This person takes his/her share of family responsibilities.
- 9 This person takes what I say the wrong way.
- 10 When I'm upset, this person usually knows why.
- 11 When I'm upset, I know this person really cares.
- 12 Even when I admit I'm wrong, this person doesn't forgive me.
- 13 This person and I argue about how we spend our time.
- 14 When I have a problem, this person helps me with it.
- 15 This person complains that I expect too much of him/her.
- 16 If this person is angry with me, I hear about it from someone else.
- 17 This person lets me know how he/she feels about me.
- 18 This person still loves me even when I argue with him/her.
- 19 I never know how this person will react when I make a mistake.
- 20 This person is all wrong about the importance of religion.
- 21 When there's a problem between us, this person finds a new way of working it out.
- 22 This person often ruins things for me.
- 23 This person is available when I want to talk to him/her.

- 24 When this person gets angry with me, he/she stays upset for days.
- 25 This person gets too involved in my affairs.
- 26 This person gives me a chance to explain when I make a mistake.
- 27 This person is right about the importance of education.
- 28 When problems come up between us, this person is all talk and no action.
- 29 This person expects too much of me.
- 30 Even if this person disagrees, he/she still listens to my point of view.
- 31 This person takes it out on me when he/she has had a bad day.
- 32 This person really trusts me.
- 33 This person is always on my back.
- 34 There's a big difference between what this person expects of me and how he/she behaves.
- 35 I can count on this person to help me in a crisis.
- 36 This person and I have the same views about who should do what in our family.
- 37 I often don't know whether to believe what this person says.
- 38 When this person is upset, he/she tries to get me take sides.
- 39 This person worries too much about me.
- 40 I don't need to remind this person to do his/her share.
- 41 This person is right about the importance of being successful.

APPENDIX I
FAM SUBSCALES

FAM III SUBSCALES:		GS (50 items)	DS (42 items)	SRS (42 items)	Range of Scores
Task Accomplishment	X		X	X	0-15 raw score
Role Performance	X		X	X	0-15
Communication	X		X	X	0-15
Affective Expression	X		X	X	0-15
Involvement	X		X	X	0-15
Control	X		X	X	0-15
Values and Norms	X		X	X	0-15
Social Desirability (7 items)	X				0-24
Defensiveness (8 items)	X				0-24

APPENDIX J
DEMOGRAPHIC INFORMATION

NAME: _____ MARRIED TO: _____

ADDRESS: _____

PHONE: _____

CHURCH YOU ATTEND: _____

HOW MANY YEARS MARRIED? _____

NUMBER OF CHILDREN? _____

NUMBER OF CHILDREN LIVING AT HOME? _____

ON THE FOLLOWING SCALE CIRCLE THE NUMBER THAT BEST INDICATES
HOW YOU SEE YOUR LEVEL OF SPIRITUAL MATURITY:

1

2

3

4

5

6

7

low maturity

moderate maturity

high maturity

APPENDIX K SPIRITUAL MATURITY INDEX

SA = strongly agree, MA = moderately agree, A = agree,
D = disagree, MD = moderately disagree, SD = strongly disagree

- 1 My faith doesn't primarily depend on the formal church for its vitality.
- 2 The way I do things from day to day is often affected by my relationship with God.
- 3 I seldom find myself thinking about God and spiritual matters during each day. (R)
- 4 Even if the people around me opposed my Christian convictions, I would still hold fast to them.
- 5 The encouragement and example of other Christians is essential for me to keep on living for Jesus (R).
- 6 I feel like I need to be open to consider new insights and truths about my faith.
- 7 I am convinced that the way I believe spiritually is the right way.
- 8 People that don't believe the way I do about spiritual truths are hard-hearted (R).
- 9 I feel that a Christian needs to take care of his or her own needs first in order to help others (R).
- 10 My faith doesn't seem to give me a definite purpose in my daily life (R).
- 11 I find that following Christ's example of sacrificial love is one of my most important goals.
- 12 My identity (who I am) is determined more by my personal or professional situation than by my relationship with God (R).
- 13 Walking closely with God is the greatest joy of my life.
- 14 I feel that identifying and using my spiritual gifts is not really important (R).
- 15 I don't seem to be able to live in such a way that my life is characterized by the fruits of the Spirit (R).

16 When my life is done, I feel like only those things that I've done, as part of following Christ will matter.

17 I believe that God has used the most "negative" or difficult times in my life to draw me closer to him.

18 I feel like God has let me down in some of the things that have happened to me (R).

19 I have chosen to forego various gains when they have detracted from my spiritual witness or violated spiritual principles.

20 Giving myself to God regardless of what happens to me is my highest calling in my life.

21 I don't regularly study the Bible in depth on my own (R).

22 I actively look for opportunities to share my faith with non-Christians.

23 My relationships with others are guided by my desire to express the love of Christ.

24 I don't regularly have times of deep communion with God in personal (private) prayer (R).

25 More than anything else in life I want to know God intimately and to serve Him.

26 Worship and fellowship with other believers is a significant part of my Christian life.

27 It seems like I am experiencing more of God's presence in my daily life than I have previously.

28 I feel like I am becoming more Christ-like.

29 I seem to have less consistent victories over temptation than I used to (R).

30 On the whole, my relationship with God is alive and growing.

(R)=reversed scored item. SA for 18 items not reversed indicate mature spirituality.

APPENDIX L
EXPERIENCES IN CLOSE RELATIONSHIPS INVENTORY

1 2 3 4 5 6 7
DISAGREE NEUTRAL/ AGREE
STRONGLY MIXED STRONGLY

- 1 I prefer not to show a partner how I feel deep down.
- 2 I worry about being abandoned.
- 3 I am very comfortable being close to romantic partners.
- 4 I worry a lot about my relationships.
- 5 Just when my partner starts to get close to me I find myself pulling away.
- 6 I worry that romantic partners won't care about me as much as I care about them.
- 7 I get uncomfortable when a romantic partner wants to be very close.
- 8 I worry a fair amount about losing my partner.
- 9 I don't feel comfortable opening up to romantic partners.
- 10 I often wish that my partner's feelings for me were as strong as my feelings for him/her.
- 11 I want to get close to my partner, but I keep pulling back.
- 12 I often want to merge completely with romantic partners, and this sometimes scares them away.
- 13 I am nervous when partners get too close to me.
- 14 I worry about being alone.
- 15 I feel comfortable sharing my private thoughts and feelings with my partner.
- 16 My desire to be very close sometimes scares people away.
- 17 I try to avoid getting too close to my partner.
- 18 I need a lot of reassurance that I am loved by my partner.
- 19 I find it relatively easy to get close to my partner.
- 20 Sometimes I feel that I force my partners to show more feeling, more commitment.
- 21 I find it difficult to allow myself to depend on romantic partners.
- 22 I do not often worry about being abandoned.
- 23 I prefer not to be close to romantic partners.
- 24 If I can't get my partner to show interest in me, I get upset or angry.
- 25 I tell my partner just about everything.
- 26 I find that my partner(s) don't want to get as close as I would like.
- 27 I usually discuss my problems and concerns with my partner.
- 28 When I'm not involved in a relationship, I feel somewhat anxious and insecure.
- 29 I feel comfortable depending on romantic partners.
- 30 I get frustrated when my partner is not around as much as I would like.
- 31 I don't mind asking romantic partners for comfort, advice, or help.

- 32 I get frustrated if romantic partners are not available when I need them.
- 33 It helps to turn to my romantic partner in times of need.
- 34 When romantic partners disapprove of me, I feel really bad about myself.
- 35 I turn to my partner for many things, including comfort and reassurance.
- 36 I resent it when my partner spends time away from me.

APPENDIX M

SPIRITUAL WELL-BEING SCALE

SA=strongly agree, MA=moderately agree, A=agree,
D=disagree, MD=moderately disagree, SD=strongly disagree

- 1 I don't find much satisfaction in private prayer with God.
- 2 I don't know who I am, where I came from, or where I am going.
- 3 I believe God loves me and cares about me.
- 4 I feel that life is a positive experience.
- 5 I believe that God is impersonal and not interested in my daily situations.
- 6 I feel unsettled about my future.
- 7 I have a personally meaningful relationship with God
- 8 I feel very fulfilled and satisfied with life.
- 9 I don't get much personal strength and support from my God.
- 10 I feel a sense of well-being about the direction my life is headed in.
- 11 I believe that God is concerned about my problems.
- 12 I don't enjoy much about life.
- 13 I don't have a personally satisfying relationship with God.
- 14 I feel good about my future.
- 15 My relationship with God helps me not to feel lonely.
- 16 I feel that life is full of conflict and unhappiness.
- 17 I feel most fulfilled when I'm in close communion with God.
- 18 Life doesn't have much meaning
- 19 My relation with God contributes to my sense of well-being.
- 20 I believe there is some real purpose for my life.

APPENDIX N RELIGIOUS MATURITY SCALE

Here are some statements that show how some people feel about religion. Please indicate how much you agree or disagree with each by circling a number on a 5-point scale where 1 = strongly disagree and 5 = strongly agree.

Strongly Disagree				Strongly Agree
1	2	3	4	5

1. My religious beliefs provide me with satisfying answers at this stage of my development, but I am prepared to alter them as new information becomes available.
2. I am happy with my present religion but wish to be open to new insights and ways of understanding the meaning of life.
3. As best I can determine, my religion is true, but I recognize that I could be mistaken on some points.
4. Important questions about the meaning of life do not have simple or easy answers; therefore faith is a developmental process.
5. * I could not commit myself to a religion unless I was certain that it was completely true.
6. I have struggled in trying to understand the problems of evil, suffering, and death that mark this world.
7. Churches should concentrate on proclaiming the gospel and not become involved in trying to change society through social or political action.
8. While we can never be quite sure that what we believe is absolutely true, it is worth acting on the probability that it may be.
9. I have found many religious questions to be difficult and complex so I am hesitant to be dogmatic or final in my assertions.
10. In my religion my relationships with other people are as fundamental as my relationship with God.
11. * My religious beliefs are pretty much the same today as they were five years ago.

APPENDIX O HELPFULNESS OF PRAYER SCALE

In this study a modified version of the Helpfulness of Prayer Scale will be used. Specifically, the same 15-point Likert Scale will be used and participants will be asked to indicate the helpfulness of prayer based on the following statement:

Prayer as communication with a Higher Being is thought to be one method for changing the perception of Christian married couples' relationship. Please indicate whether prayer was helpful to you. Rate how helpful on the scale provided.

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Not at all helpful

Extremely helpful

APPENDIX P
SUMMARY TABLE FOR MEANS AND STANDARD DEVIATIONS FOR
EXPERIMENTAL AND CONTROL GROUPS

DV	EXPERIMENTAL GROUP						CONTROL GROUP					
	PRE-TEST		POST-TEST		PRE-TEST		POST-TEST		PRE-TEST		POST-TEST	
	MALE M/SD	FEMALE M/SD	MALE M/SD	FEMALE M/SD	MALE M/SD	FEMALE M/SD	MALE M/SD	FEMALE M/SD	MALE M/SD	FEMALE M/SD	MALE M/SD	FEMALE M/SD
1.	15.64/1.18	15.72/1.30	15.72/1.24	15.64/1.25	15.92/1.57	15.26/1.58	15.46/1.10	15.19/1.35				
2.	14.40/1.82	15.28/2.11	14.88/1.50	15.36/1.80	15.07/1.49	14.88/1.58	14.73/1.53	14.61/1.62				
3.	14.04/1.20	14.96/1.76	14.60/1.90	14.84/0.89	14.42/1.70	14.73/1.82	14.73/1.18	14.96/1.31				
4.	64.88/5.15	62.16/6.34	63.96/6.74	63.04/5.98	63.53/6.19	61.69/5.68	63.88/7.26	62.19/6.29				
5.	60.08/15.0	55.84/15.4	58.84/16.2	53.48/14.1	58.03/15.9	53.88/14.3	57.57/15.8	53.03/13.2				
6.	16.12/6.07	14.96/6.23	15.52/5.95	14.28/5.24	16.07/7.37	16.03/7.61	18.19/8.09	16.15/8.80				
7.	21.32/5.41	20.16/5.03	18.92/6.70	17.64/6.37	21.38/5.06	22.07/6.44	20.84/7.34	18.96/9.11				

Note. DV = Dependent Variable; M = Mean; SD = Standard Deviation; 1. = Interpersonal Communication; 2. = Affective Expression; 3. = Affective Involvement; 4. = Avoidance; 5. = Anxiety; 6. = Religious Well-Being; 7. = Existential Well-Being.

APPENDIX Q
RELIABILITY ESTIMATES

Reliability Estimates

	RMS	SMS	RWB	EWB	AVOID	ANX	COM	AFFEC	INVOL
Reported	.68	.87	.94	.86	.88	.88	.77	.59	.64
Observed	.68	.91	.94	.89	.04	.81	.67	.05	.88

Note: RMS = religious maturity scale; SMS = spiritual maturity index scale; RWB = religious well-being; EWB = existential well-being; AVOID = avoidance; ANX = anxiety; COM = interpersonal communication; AFFEC = affective expression; INVOL = affective involvement.

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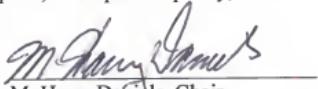
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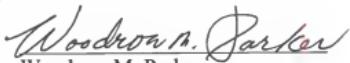
BIOGRAPHICAL SKETCH

Kenneth Lee Smylie was born in Oakland, California, on December 8, 1947. After graduating from Vallejo High School in June of 1966, he attended Ambassador College, Bricket Wood, England, where he received his bachelor's degree in theology in 1970. Dr. Smylie obtained a Master of Arts degree in agency counseling from Appalachian State University, Boone, North Carolina, in 1978. An Education Specialist degree was earned in 1995 from the University of Florida. Dr. Smylie served as a church pastor from 1970 to 2002 with the Worldwide Church of God. In January of 2003, Dr. Smylie established his private counseling practice, Pastoral Counseling Center, in Gainesville, Florida. Dr. Smylie enjoys international travel, walking and spending time with his family.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy


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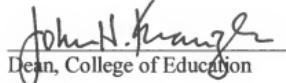

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This dissertation was submitted to the Graduate Faculty of the College of Education and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy

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